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A REPOSITORY OF

Science, Literature, and General Intelligence,

DEVOTED TO

ETHNOLOGY, PHYSIOLOGY, PHRENOLOGY, PHYSIOGNOMY, SOCIOLOGY, PSYCHOLOGY, EDUCATION,
MECHANISM, AGRICULTURE, NATURAL HISTORY, AND TO ALL THOSE PROGRESSIVE
MEASURES WHICH ARE CALCULATED TO REFORM, ELEVATE, AND IMPROVE
MANKIND, SPIRITUALLY, INTELLECTUALLY, AND SOCIALLY.

Embellished with Numerous Portraits from Life, and other Engravings.

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“Quiconque a une trop haute idée de la force et de la justesse de ses raisonnemens pour se croire obligé de les soumettre a une expérience mille et mille fois répétée, ne perfectionnera jamais la physiologie du cerveau.”—GALL.

“I regard Phrenology as the only system of mental philosophy which can be said to indicate, with anything like clearness and precision, man’s mixed moral and intellectual nature, and as the only guide short of revelation for educating him in harmony with his faculties, as a being of power ; with his wants, as a creature of necessity ; and with his duties, as an agent responsible to his Maker and amenable to the laws declared by the all-wise Providence.”—

JOHN BELL, M.D.

“To Phrenology may be justly conceded the grand merit of having forced the inductive method of inquiry into mental philosophy, and thus laid the permanent foundations of a true mental science.”—*Encyclopedia Britannica*, 8th Edition.



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Index to Volume 9.—January to June, 1874.

A.

Arctic Explorations.....	12
Analogous Expression in Man and Animals.....	13
Articulation School for Mutes..	17
Another Tunnel through the Alps.....	46
Agricultural Hints...66, 204, 270,	337
Answers to Correspondents.69,	140, 207, 273, 339,
	403
Archæology in America.....83,	155
Agassiz, Louis, Death of.....	102
Absolutely Heartless.....	108
Appetite.....	113
Abbe, Cleveland, "Probabilities,".....	213
Aumale, the Duke d'.....	265
Anybody Can Do It.....	267
American Fruit in England....	271
Agassiz—poetry.....	323
Attention, Power of.....	341
Anaesthetic Revelation.....	343
Adams, Dudley W., Master of American Granges.....	377

B.

Basis of Education.....	37
Brain Exhaustion.....	45
Bourbon Revival in Europe....	59
Book Notices...73, 143, 211, 277,	343
Brain, Dr. Broca.....	114
Broca and Phrenology.....	114
Bazaine, ex-Marshall.....	125
"Be Not Righteous Overmuch"—poetry.....	130
Beyond—poetry.....	177
Beautiful in Old Age.....	242
Boston Gossip.....	275
Boys' Sports.....	292
Birds, Color of, Effected by Climate.....	310
Bees in the United States.....	338
Bible and Phrenology.....	389
Brain, Size of.....	403
Brain and Mind.....	404
Beard, How to Make it Grow..	404

C.

Clean and Unclean Literature..	31
Centennial, National.....	52
Coal, Origin of.....	54
Class of 1873.....65, 132,	327
Correspondents.....	69
Castelar, Emilio.....	118
Closing Exercises of Class of '73	132
Conversations About Faces.160,	285
Clouds that Pass.....	177
Crime—its Cause and Cure...80,	216
Commercial Obstructions.....	261
Character Reading.....	267
Cost of Printing Office....	268
Charity—True and False.....	295
Children, How to Govern and Train.....	317
Courage in the Right—poetry..	358
Class in Phrenology.....	390
Compulsory Education.....	406

D.

Deaf and Dumb, Articulation School for.....	17
Declined, Respectfully.....	58
Dogs Going to Bed.....	140

Denominations, by Taste and

Temperament.....	153
Dockery, Alfred, M.C.....	166
Domestic Help.....	172
Do Your Own Thinking.....	188
Dreams and their Fulfillment..	219
Duke d' Aumale.....	265
Dues Nature Cure?.....	314
Duchess Breed of Cattle.....	337
Dreams and Clairvoyance.....	405

E.

Expression in Man and Animals	13
English Literature.....	63
Epitaphs.....	104
Eye-Cups.....	141
Early Hours or Early Rising..	187
English, Sources of our.....	200
Evergreen Trees.....	262
Electro-Biology.....	385
Education in Illinois.....	

F.

Flogging.....	37
Fruits, How to Select and Grow	66
Fishes—South and West.....	98
Forest Trees and their Culture.	122
Faults of Public Speakers.....	129
Fire-Proof Buildings.....	130
Faces, Human.....160,	285
Free Religion in America.....	200
French Canadians.....	234
Firmness.....	269
Fruit, American, in England...271	
"Follow Your Nose".....	276
Faces, Conversations About 160,	285
Fillmore, Millard, Death of....	288
Free Churches.....	328
Frere, Sir Bartle.....	332
Farmer's Song.....	338
Face and Its Impressions.....	368
French, Mrs. Bella.....	369
Faults in Elocution.....	400

G.

Geology, Genesis of.....	54
Generally.....	107
Good, True and Beautiful.....	203
Going to Bed.....	256
Gardening, Premature.....	270
Gentleman, The Real.....	323
Growth and Decay of Mind....	336
Granges.....	377

H.

Hoosac Tunnel.....21,	91
Holidays.....	49
Human Brain.....	114
Hall's, Rev. Dr., New Church..	190
Hereditary Character.....	191
How to Endure.....	221
Heads and Hats and Character.	225
Horses' Feet, Care of.....	271
Horse Physiognomy.....	290
Human Sacrifices.....	308
How to Govern and Train Children.....	317
How it is Done.....	327
Head Measurements.....	340
Handsome Murderer—Lowenstein.....	398
Historical Items.....	402
How Shall They Be Saved?....	406

I.

Insanity—its Moral Treatment, by a Lunatic.....	40
Irish Customs.....64,	137
Indian Medicine Man.....	88
It Is'nt All in Bringing Up—poetry.....	110
Immortality Physiologically considered.....	150
Infallibility.....	183
Imitation—Moral Sentiments..	207
"Its" and somewhat about it..	334
Irish Saints.....	392
Immortality, Discussion on....	395

J.

Judiciary, An Elective.....	164
John and Jane—How they Kept House.....	360

K.

Kingdom, Parable of the.....	352
Knapp, Elder Jacob, Death of..	356
Kaulbach, Wilhelm Von.....	392

L.

Library.....	73
Love Works Miracles.....	111
Lotteries.....	116
Livingstone, Death of Dr.....	191
Lesson of the Day—poetry.....	219
Life Insurance—Phys. and Phrenology.....	254
Lessons Learned in Playhours.	292
Life's Sweetest Memory.....	293
Latin and Teutonic Races....	298
Life in the Deep Sea.....	329
Lewis, Dr. Dio.....	345
Law of Life—poetry.....	351
Language as Related to Man...393	

M.

Massey, Gerald.....	6
Money, Its Functions and Requirements.....25, 125, 169,	228
My Mother—poetry.....	36
Murchison, Sir Roderick.....	56
Mirth.....68, 139, 206, 272,	339
Magnetism, Personal.....	69
Mound Builders of America..83,	155
My Mansion.....	105
Missionary Women in India....	110
Man and His Appetite.....	113
Maple Sugar.....	139
Mental Organs, Nature and Revelation.....	142
My Impressions of Names....	246
Masks, Why Wear?.....	287
Mind, Growth and Decay of....	336
Memory.....	340

N.

Never Pays—poetry.....	31
Needs of the Body, Basis of Education.....	37
Nautical School.....	53
Names, My Impressions of....	246
Natural Language.....	291
New Phrenology.....	315

Nearer, My God, to Thee — poetry	349
New American Sculptor.....	367
Names of Places.....	392
Natural Artist in Virginia	401

O.

Only Once.....	34
Occurrence Down South.....	108
Oratory	129
Obliquities of Character.....	147
Our Evergreen Trees.....	262
Orchards, Planting	271
Our Opportunities.....	386
Octagon in Central Park.....	399

P.

Perverted Self-Sacrifice	33
Phrenology, The Use of It.....	50
Phrenology, Law of.....	72
Phrenology and Swedenborg.....	72
Proctor, Richard Anthony	78
Pyramid, The Great.....	90
Pardee and his Donation.....	100
Pet Delusions.....	111
Phrenology and Dr. Broca.....	114
Precocious Children.....	117
Phrenological Convention.....	118, 261
Pen and Ink Sketches of Irish Customs	64, 137
Pre-Natal Influences	192
Peat as Fuel.....	204
"Probabilities"	213
Phrenology, Some Fundamental Principles.....	226
Put Down the Brakes.....	227
Pennsylvania Railroad.....	231
Psychology of the Sexes.....	236
Parker, James, Railway Con- ductor	244
Press Notices.....	259
Phrenology, Anybody Can Do It.....	267
Printing Office, Cost of.....	268
Physiognomy of the Horse.....	290
Pretty Don't Hurt	296
Pompeii, Visit to.....	311
Phrenology, The New.....	315
Porter, Rev. Dr., on Phrenology	319
Phrenology and Old Style Met- aphysics.....	326
Parable of the Kingdom.....	352
Phrenology and the Bible.....	389
Phrenological Instruction.....	390
Plant Life in our Territories.....	396
Phrenology, How to Learn.....	404

Q.

Quack Phrenologists	273
---------------------------	-----

R.

Religion, Scientific Basis of.....	120
Royal Pair, Duke and Duchess of Edinburgh	178
Resurrection of Phrenology	190
Religion, Free, in America.....	201
Rosa, Parepa.....	291
Races, Latin and Teutonic.....	298
Right Man in the Right Place.....	325

S.

Success, Real.....	11
Slave Trade and those Inter- ested.....	38
Salutatory	47
Sincere Work.....	55
"Shall My Boy Strike Back?".....	105
Scientific Basis of Religion.....	120
Spurzheim and Owen in 1827.....	148
Siamese Twins	184
Study and Rest.....	193
Shaker Problem.....	194
Sponges, Hints about.....	197
Sources of our English.....	200
Short-Horn Cows	205
Schwartz, Maria Sophia.....	222
Stolen Glimpses.....	242
Spiritualism.....	276
Sumner, Charles, Death of.....	279
Scholarship in our Class.....	340
Study of the Mind and of the Bible.....	349
Stolen Glimpses, No 2.....	358
Sunday Evening in Water St.....	372
Silk Trade in America.....	374
Sacramental Wines.....	387
Suggestive Facts.....	391
Size of Brain.....	403

T.

Texas, Life in Northern.....	28
Throwing Money in the Fire.....	29
Two Sides of Life.....	34
Telegraphic Courtship.....	36
Thirty Reasons	53
Timber, Best Time to Cut.....	139
Tastes and Temperaments a Reason for Denominations.....	153

Talking, Reading, Writing.....	189
Timber and Ornamental Trees.....	198
Turncoat, Definition of.....	207
Telegraphing Extraordinary.....	215
Trist, Nicholas P.....	233
Temperance Movement, Great.....	257
Ten Business Rules.....	258
Trees, Evergreen	262
Telegraphy, Science to Learn.....	273
Troubles Blessings in Disguise?	293
True Altar, The.....	296
Temperance Commission, Na- tional.....	324
Teetotal Muddlement.....	382
Temperance in all Things.....	383

U.

Use of Phrenology.....	50
Unwritten Poetry.....	163

V.

Vice and Crime—Causes and Cure.....	50, 216
Vampires and Vampirism.....	189
Vital Force—Mind and Soul.....	209
Vitality and Chemistry.....	247
Violent Deaths.....	256

W.

Wakes, Irish	64, 137, 210
Wisdom.....	68, 139, 206, 272, 338, 403
Wit.....	68, 139, 206, 272, 339, 402
What They Say.....	70
What Pays the Best.....	138
Waite, Morrison R., Chief-Jus- tice	146
Woman at the South and West.....	174
Way to Do.....	176
Was He Born So?.....	250
Will and Firmness.....	269
Wedding Ring, How Worn.....	274
Water Brain.....	339
Water St., Sunday Evening in.....	372
What They Say.....	405

Y.

Yates, Richard, Speech of.....	250
Yale Metaphysica, Porter on Phrenology	319

ILLUSTRATIONS.

Ape and Man	16
Agassiz, Prof. Louis.....	103
Abbe, Cleveland, "Probabili- ties"	213
Adams, Dudley W., Master of American Granges	378
Bazaine, Ex-Marshall.....	125
Brooks, Mrs. Caroline S., New Sculptor	367
Butter Sculpture.....	367
Cat-Man	13
Cat-Woman	14
Cuvier	16
Castelar, Emilio	119
Cow, \$30,600.....	205
Donkey-Man.....	167
Dockery, Alfred, M.C.....	167
Duke of Edinburgh.....	179
Duchess of Edinburgh.....	178
Duke D' Aumale	265
Dreaming Iolanthe—in Butter.....	367

Eagle-Man	16
Fox-Man	14
Frost, B. D., Engineer Hoosac Tunnel	91
Fillmore, Millard.....	288
Frere, Sir Bartle.....	333
French, Mrs. Bella.....	370
Girl Sacrificed to Ju-Ju.....	309
Hoosac Tunnel.....	22, 23, 25, 93, 95
Hindoo Merchant	38
Hindoo Governor.....	38
Heads and Hats and Character.....	225
Ju-Ju House at Bonny	310
Knapp, Elder Jacob.....	357
Lafayette College, Easton, Pa.....	101
Lewis, Dr. Dio.....	345
Lowenstein, Emil, Murderer.....	398
Massey, Gerald.....	5
Murchison, Sir Roderick.....	57
Mound Builders	83-87, 155-158

Old-Hen-Woman.....	15
Pig-Man	16
Poodle-Dog-Man.....	17
Proctor, Richard Anthony	77
Pardee, A	100
"Probabilities, Old".....	213
Parker, James	244
Pompeii Exhumed	311
Quack Phrenologist.....	273
Rats, Two	14
Roué, The.....	15
Shanley, Francis, Hoosac Tun- nel Contractor	24
Shanley, Walter, Hoosac Tun- nel Contractor	24
Slave Boy and Girl.....	39
Siamese Twins at 18 and at 60.....	185
Schwartz, Maria Sophia.....	223
Sumner, Charles	279
Trist, Nicholas P.....	238

CONTENTS—JULY TO DECEMBER, 1874.

A.

Agnes Worth.....	31
Agricultural Hints...64, 134, 202, 270,	339, 408
Answers to Correspondents...66, 137,	204, 272, 341, 409
Apoplexy.....	66
Agreeable People.....	127
Advertising for a Wife.....	132
Absence of Mind.....	137
Against the Tide.....	147
Appetite and Resolution.....	153
Ainsworth, Frank B., Supt. Ind.	
House of Refuge.....	213
A Dream.....	219
Alcohol, Stomach, Brain.....	273
Ancient Inhabitants of Western	
Europe Plack.....	300
American Children.....	337
Adulation.....	337
Another Troublesome Boy.....	370
Agriculture as related to Civiliza-	
tion.....	391
All Ashore.....	400

B.

Brain Development, True Theory	
of.....	52
Book Notices...71, 141, 211, 277,	414
Bending the Twig.....	102
Brain Work, Does it wear the	
Brain?.....	112
Bolckow, M.P., H. W. F., Iron	
Master of England.....	122
Be Prompt—Be on Time.....	130
Brain, Functions of the.....	134
Bentham, Jeremy.....	183
Both Sides.....	236
Bawdy Books.....	264
Baxter, William, the Great In-	
ventor.....	296
Boy, That Troublesome.....	310
Bickley, Jr., Samuel.....	319
Bible Puzzles.....	342
Bender, John S.....	349
Brain, The, (Poetry).....	352
Blessings in Disguise.....	401
Brain, Weight of.....	490
Bond and Currency Question...	413

C.

Character, Three-fold.....	351
Come to Me, (Poetry).....	371
Collier's Candle, A New.....	394
Civilization in India, China and	
Japan.....	395
Christmas, A Merry.....	402
Christmas Presents.....	404
Coquetry in Little Girls.....	30
Cook's Excursions.....	44
Children, How to Govern and	
Train, No. 2.....	48
Cremation vs. Inhumation.....	51
Courting and Divorce.....	105
Colorado for the Tourist and	
Health Seeker.....	106
Cost of our Government.....	110
Compulsory Education and	
American Citizenship.....	163
Coal Cutter, An American.....	164
Curious Facts about a Curious	
Body.....	178
Character Reading.....	183
Class 59.....	183, 267, 269
Cruelty and Crime.....	221
Co-operation.....	224
Cuckoo.....	238
Children, How to Put them to	
Bed.....	239

Costly Funerals.....	265
Cultivating and Restraining Fac-	
ulties.....	286
Cost and Value of a Man.....	333

D.

Despondent and Despairing, Let-	
ter to the.....	360
Dean Howson of Chester, Eng.....	10
Duty and Manhood.....	13
Decoration Day.....	17
Domestic Incompatibility.....	57
Dreams and their Fulfillment....	63
Differences of the Sexes, Signif-	
icant.....	94
Dress Plainly.....	169
Don't Marry a Man if he Drinks	
202.....	202
Dream, A, Poetry.....	219
Drinkers, Smokers and Chewers	
need not apply.....	251
"Drummer" on Drink.....	338

E.

Evolution, A Shaker's View.....	399
Eyes; their Differences and Sig-	
nifications.....	18
Energy.....	103
Electric Exploders.....	119
Effects of Weather on Piety.....	176
Economy.....	314

F.

Fizz, Whizz, Bang!—4th July... 61
Faces, Glances at..... 89
First Year's Experience as a Lec-
turer..... 113
First Locomotive..... 138
Finance—Catechism on Money.. 156
Forests, The Nation's..... 165
Fashion, In the toils of..... 170
Fret, Fret, Fret..... 217
Fair Haven..... 268
Faculties, Cultivation and Re-
straining..... 286
Famous Trees of the World..... 316
Foundation, The, E. Everett.... 318
Florida..... 328
Farming Statistics..... 330
Failure or Success in Life..... 400
Faith or Reason, Which?..... 407
Fulton and Steam Navigation... 410

G.

Glances at Faces..... 89
Grand Pacific Hotel, Chicago... 108
Genesis and Inter-relation of the
Sciences..... 116
Great Warriors of Europe, Five.. 383

H.

Hayden, Ferdinand V., Character	
and Biography.....	5
How to Discourage your Minister	
12.....	12
How to Travel at Home and	
Abroad.....	44
How to Govern and Train Child-	
ren, No. 2.....	48
Hecker, John, The late.....	60
Hicks, Thomas F., Character and	
Biography.....	75
Hymn of the Temperance Women	
84.....	84
Hypnotism and Mesmerism.....	86
How to Build up a Man.....	129
Hay, How to have Good.....	134
Home, Where is.....	170

Hydrophobia induced by Fear... 181
Hints on Private Reading..... 196
Heart against Intellect..... 205
Home Politeness..... 236
Husband's Mistake..... 240
"He was Reviled"..... 263
Hygiene of Infancy..... 312
Headache, Philosophy of..... 395
How to Draw a Crowd..... 403
Human Body, How Renewed.... 410

I.

Ideal of Christ's Person..... 13
Immortality..... 28, 256
Irish Courtships and Weddings.. 96
In Time to Come..... 197
Integral Commonwealth—Co-op-
eration..... 224
Immortality not Proven..... 250
India, China and Japan, Civiliza-
tion in..... 335

J.

Jesus, Was He a Blonde?..... 155
Judging Others..... 263
Judging by Faces..... 315

K.

Keep your Promise..... 248
Knowledge by Transmission and
Induction..... 288
Kaffir Postman..... 304

L.

Leap-Year Day..... 67
Lick, James, Benevolent Million-
aire of California..... 146
Liberty and its Relations..... 164
Little Blue Eyes..... 246
Life, Spiritual and Material..... 288
Liquor Business in the United
States..... 295
Little Wiggle (Poetry)..... 370
Labor Problem..... 377
Lecturing on Phrenology..... 385
Literary Sharks..... 393
Largest Farm in England..... 409
Lawyer, What he Requires..... 411

M.

Must Women be Idle?..... 29
Mountain Making..... 56
Mill River Calamity... 61
Moon-Struck..... 67
Mesmerism and Hypnotism..... 86
Morbid Impulses..... 111
Macduff's First Year as a Lec-
turer..... 113
Money, Catechism on..... 156
Mind, Is it Spiritual or Material? 206
Morbid Moods of Mighty Minds. 220
Money—Specie Basis Banking... 293
Mischief of Ideality..... 313
Mormon Tabernacle..... 325
Music..... 325
Mind and Brain..... 406

N.

North Pole..... 126
Nitrous Oxide—Laughing Gas... 139
New Religious Manifesto..... 199
Negro Population..... 231
New Location for Faith..... 274
New Collier's Candle..... 394

O.	Races—Advancing and Retreat- ing..... 274	Temperance Secured by Educa- tion..... 326
Opportunity..... 78	Renewal of Body..... 410	Thanksgiving, Christmas and New Year..... 335
Oberlin College..... 152	S.	Talkers and Thinkers..... 341
Our Negro Population..... 231	Summer's Vacation..... 35	Teacher, The..... 347
Over-Study..... 272	Shall We Whip?..... 50	U.
Owl, The Eagle..... 311	Swing, Professor David..... 62	Unbend that Bow of Sadness..... 232
Only Trifles; or, A Life Expe- rience..... 364	Sleep, How Much..... 66	United States—Population In- creasing..... 379
Our Platform..... 372	Size of Brain..... 77	V.
Our National Currency..... 382	Specimens for our Cabinet..... 115	Vice and Crime, Cause and Cure, No. 3..... 7
Our Wheat Crop..... 408	Studying for a Profession..... 133	Vacation, A Summer's..... 35
P.	Skulls, How to Clean them..... 138	Verdancy Victimized..... 61
Primeval Race Double-Sexed..... 14	Soul, Mind, Spirit..... 138	Venice..... 126
Parable of the Kingdom. No. 2..... 79	Size, Quality, Power..... 139	Value of a Comma..... 165
Preaching—Lecturing..... 131	Sunday-School Teaching..... 139	Venus Fly Trap..... 176
Personal Popularity..... 138	Superstition..... 148	Ventriloquism Learned..... 204
Perverved Appetite..... 140	Scott, Thomas A., Pres't Penn. Railroad..... 161	Venus, Transit of..... 258
Prisons, Religious Services in..... 149	School-Girl of the Period..... 167	Value of Hens and Eggs in France..... 409
Phrenology in the Family..... 174	Sunny Side..... 175	W.
Piety, Effects of the Weather on..... 176	Soelling..... 205	Women, Must they be Idle..... 29
Phrenology in Domestic Educa- tion—Bending the Twig..... 102	School-Girl Nature..... 245	Worth, Agnes..... 31
Phrenology, What it has to Carry..... 198	Sketch from Life..... 247	Whip, Shall we?..... 50
Partnership among Faculties..... 201	Severe Measures..... 269	Wisdom..... 69, 210, 276, 346, 414
Phrenology in Texas..... 209	Shapes of Heads as affecting Modes of Worship..... 273	Wit..... 70, 210, 276, 346, 414
Phrenology a Science..... 216	Some Men's Ideal of a Wife..... 307	What Women Can Do..... 99
Purity of Life..... 218	Southern Gentleman's Attempt at Farming..... 328	Was He Born So?..... 100
Politeness at Home..... 236	Science and Religion..... 334	What Shall we Do with the Boy?..... 105
Plea for Phrenology..... 249	Spiritual Evolution..... 353	Wonderful Discovery..... 128
Palmer, Sir Roundell..... 252	Sex in Education..... 362	Weight of Infants..... 137
Pre-Adamite Man Not in the Bi- ble..... 321	Seaman, American..... 405	Women Talkers, A word about..... 166
Phrenology in Scotland..... 327	T.	Where is Home..... 170
Prismatic Colors..... 331	The Mother..... 35	Wagner as a Composer..... 195
Postal Statistics..... 332	True Theory of Brain Develop- ment..... 52	What Phrenology has to Carry..... 198
Power of Example..... 336	Tobacco and Robbery..... 56	Woman's Wrongs..... 209
Psychology, Experiments in..... 338	Temperance, Self-Denial..... 58	Walking Dictionary..... 67, 209
Psychology: a New System..... 355	The Secret..... 94	What am I good for?..... 222
Prominent National Types..... 366	They Call us Old, Dear John..... 94	Work that Wins..... 246
Pringle's Pay-day..... 368	That Boy Did it..... 104	Who will Do it?..... 267
Phrenology, Facts About..... 411	Trinity of Literature..... 124	Women, Personal Independence in..... 305
Phrenology to the Rescue..... 412	Taking Cold..... 181	Wife, Some Men's Ideal of a..... 307
R.	Telescopes in America and Eu- rope..... 189	Why Everybody is Cross..... 310
Real Lady, The..... 43	Telescopes, The World's..... 199	Watering Horses After Meals..... 339
Right Way the Best..... 59	Tall Buildings in New York..... 235	Witchery of Manners..... 363
Real Success..... 78	Temperance Advocates, Repre- s. ntative..... 282	Wet Boots..... 409
Russel, Earl, and the Washington Treaty..... 110	True Beauty..... 288	Weight of Brain..... 409
Religious Services in Prisons..... 149	The Flower Seller..... 307	Y.
Resolution and Appetite..... 153	That Troublesome Boy..... 310	Yesterday..... 341
Ruined by Good Luck..... 172	Trees, Famous, of the World..... 316	
Ross, Alexander, M.D..... 192	Traits of Character..... 320	
Roach, John, American Ship Builder..... 233		
Railways in Colorado..... 260		
Right Man in the Right Place..... 266		
Reformatory Prison for Women..... 267		

ILLUSTRATIONS.

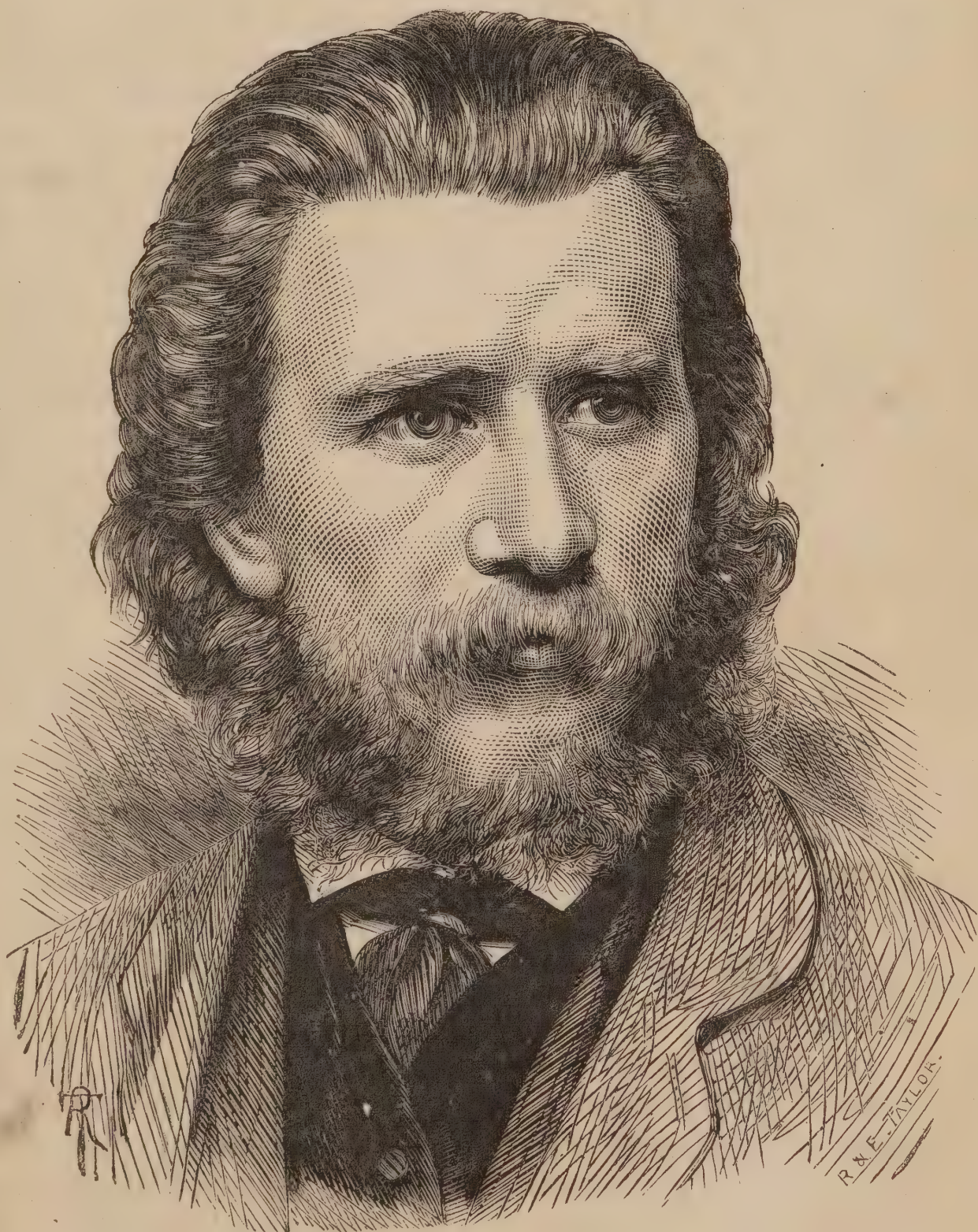
Ainsworth, Frank B..... 213	Eyes, Upraised, Down Cast, strong, Weak, etc..... 21	Owl, The Eagle..... 311
Bismarck..... 90	Excursion Party, Our..... 38-39	Old Dessauer..... 389
Bonheur, Rosa..... 91	Emerson, R. W..... 92	Poe, Edgar A..... 93
Barnes, Rev. Albert..... 91	Eugene, Priner..... 389	Palmer, Sir Roundell..... 253
Beecher, H. W..... 91	Facial Angle..... 53	Pitman, Robert C., LL.D..... 281
Bolckow, M.P., H. W. F..... 123	Facial Angle and Brain Develop- ment..... 54	Powell, Aaron M..... 281
Black, James..... 281	Frothingham, O. B..... 91	Prince Eugene..... 389
Baxter, William..... 297	Frederick the Great..... 389	Ross, Alexander, M.D..... 198
Baxter's Steam Canal Boat..... 299	Grades of Intelligence..... 55	Roach, John, American Ship Builder..... 233
Bickley, Jr., Samuel..... 319	Grand Pacific Hotel..... 109	Races—Advancing and Retreat- ing..... 375
Bender, John S..... 349	Great Warriors of Europe, Five..... 389	Swing, Professor David..... 63
Cook, Thomas..... 46	Gustavus Adolphus..... 389	Scott, Thomas A..... 161
Cook's Excursion Building..... 47	Hayden, F. V..... 5	Telescope, with Equatorial Mounting..... 190
Caucasian, Facial Angle..... 53	Howson, Dean, of Chester, Eng..... 10	Temperance Advocates, Repre- sentative..... 281
Cuckoo, American..... 239	Hicks, Thomas F..... 75	Temperance Secured by Educa- tion..... 326
D'Israeli..... 90	Kafir Postman..... 304	Venice, City of..... 127
Dow, Hon. Neal..... 281	Lick, James, Benevolent Million- aire of California..... 145	Venus Fly Trap..... 177
Eyes, Relative Positions..... 18	Miner, Rev. A. A., D.D..... 325	Venus, Transit of..... 259
“ Horizontal..... 18	Mormon Tabernacle..... 325	Wallenstein..... 389
“ Oblique..... 18	Nightingale, Florence..... 91	
“ Downward Oblique..... 19	National Types..... 367	
“ Unequal..... 19	Oberlin College..... 151	
“ Large and Small..... 20		
“ Prominent, Protuberant, Deep Set..... 20		

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GERALD MASSEY—THE POET-AUTHOR.

GERALD MASSEY.

HERE and there among the masses of society we find individuals whose mental and physical characteristics mark them as possessing the highest attributes of human organization. These individuals were born, not of parents possessing qualities which appear to have reproduced themselves in their children, these marked ones, but, on the contrary, it would seem as if nature, in giving them life, had proved recreant to her own laws. We may visit the abodes of the humblest life and find a child occasionally whose temperament and intellectual or moral manifestations awaken the doubt that he is the child of such people; and yet inquiry elicits the fact that there, among the crude, and uncultivated, and coarse, and the vile, this child with the large, deep eyes, and bold, broad forehead, and high spiritual crown, was born; and we conclude that in this, as in other things, "appearances are truly deceiving."

Our subject was born, as his biography shows, of parentage by no means elevated in English life; but there were elements mixed in his composition which awakened and stimulated inclinations to acquire a higher position among men. The restricting, cramping labor of the factory could not dwarf his soaring intellect. Opportunities, though small, yet opportunities indeed, were eagerly seized, and as the years moved on, and the young man grew older, he rose higher and higher in the scale of intellectual and moral strength and capability.

The face indicates a high order of temperament and organic development. It is a refined character. That mold of face, did one not know aught of the man, would impress him with a sense of its origin from the highest sources. There is nothing in it which furnishes a clue to the fact that its derivation

should be sought among the low and untutored. In saying this we treat the subject from the point of view of the people generally, not from the point of view of the physiological scientist, leaving entirely out of sight those germinal principles which so strangely relate to the ante-natal life of man.

The intellect of Mr. Massey is evidently clear, sharp, comprehensive, and esthetical. The upper portion of the brain is developed somewhat more than the lower, hence he is much given to the investigation of abstract subjects, considering questions chiefly in connection with their moral aspects. He belongs to the type of thinkers who urge radical measures of reform, who would break down entirely a system or institution, although it might be constructively useful in its practical application to every-day affairs, if it were, nevertheless, based upon error. Yet he is broad and liberal in moral thought, prone to discuss religious questions, not shirking a declaration of his own views when called upon.

In regard to the consideration of moral and economic affairs he is, in the main, scientific. While a Tyndall—whom he somewhat resembles—or a Youmans would investigate physical matters, searching out their underlying causes and defining their resultant consequences, Mr. Massey is found looking into the underlying causes of moral movements, and tracing them in their influences and results.

His temperament is highly sanguine, its influence being to quicken, energize, and warm up the intellectual activities. He is a hopeful, cheerful spirit as well as earnest and progressive—an enthusiast in most senses of the term, and, like enthusiasts, given to over-endeavor through the fullness and depth

of his sincerity. His errors are chiefly on the side of excessive action or thought.

The following sketch was furnished by Mr. J. M. Peebles, at our request:

Whether a man acquire greatness by constant personal effort, or whether fame and greatness are thrust upon him under circumstances over which he had little or no control, are minor considerations with the masses. The practical world, America especially, takes men precisely as it finds them, and seldom pauses to inquire about prenatal conditions or primal causes. And yet, human nature, partaking of the divine, is naturally loyal. Appreciating the struggles that precede victory, it bows to superior intellect in whatever country, or in whatever channel of mentality it may run.

It is generally considered rather difficult to write biographical sketches judiciously, because friends, partially blind to faults, are inclined to over-color the picture; while enemies underrate, or, what is absolutely unpardonable, misrepresent. I write of Mr. Massey as impressed from reading his publications; and further, as I have seen and heard him upon lecture platforms in both England and America, helping myself in the meantime to much that was recently published in James Burns' "Medium and Daybreak."

The thinker and poet, Gerald Massey, was born May, 1828, "in a little stone hut near Tring, where his father, a canal boatman, his mother, and the children then lived—if it could be called living. His bringing up was, of stark necessity, hard indeed. At eight years of age he began to work for his living in a silk mill, the wages paid him in exchange for his all-day and every-day imprisonment ranging from 9d. to 1s., and from that to 1s. 3d. per week. It was Hood's insight which guided the hand that penned such lines—

'It is not linen you're wearing out,
But human creatures' lives.'

Mr. Massey's pen, however, had been dipped in the bitterest gall of experience when he wrote—

'The devil might gloatingly pull for the peal that
wakes the child to work.'

and of feeding

'The factory's smoke of torment with the fuel of
human life.'

"From the silk mill he went to straw-plaiting, a poor exchange, which was accompanied by frequent attacks of ague. He says, 'I never knew what childhood meant. I had no childhood.' His mother managed to eke out from their sorry means a few precious pence; he learned to read at a school where the teacher and the taught were about on a par."

High attainments are preceded by struggles. The very strength we admire in towering trees has been extracted from a thousand tempests. Adversity, though a hard teacher, enables the true-souled to transform every obstacle into a monument of moral grandeur. The tender age of fifteen found young Massey in London, an "errand boy," thirsting for knowledge. "I used to read," says he, "at all possible times and in all possible places." His hunger for knowledge was so insatiable that he often suffered hunger of a more material kind to provide himself with books. At first he cared nothing for written poetry. A poem on Hope, "when he was utterly hopeless," was his first attempt at verse. "After I had begun I never ceased for about four years, at the end of which time I rushed into print." The tyranny and oppression which in his struggle for unbuttered bread he had to suffer at the hands of inflated shop-autocrats, intensified his growing sense of the abstract wrongs of his class. Feelingly he wrote—

"I know 'tis hard to bear the sneer and taunt,
With the heart's honest pride at midnight wrestle,
To feel the killing canker worm of *want*,
While rich rogues in their stolen luxury nestle;
For I have felt it; yet from earth's cold real
My soul looks out on common things, and cheerful
The warm sunrise floods all the land ideal—
And still it whispers to the worn and tearful,
Hope on, hope ever."

HIS PROGRESSIVE TENDENCIES.

Poets are the soul's prophets. Unlike cold, grubbing scientists, they give us the product of their spiritual life and intuitive insight, and appeal to the consciousness and deep sympathies of humanity for the verification. Young and enthusiastic, he studied the works of the more daring political writers. These studies ultimated in poetical contributions. "In the *Leader*, the *Christian Socialist*, the

Red Republican, and the *Spirit of Freedom*, there appeared, in quick succession, a number of lyrics that proclaimed to the world the existence of a bard-poet of unique power. They bit their way into the memories of chance readers. Mr. Hepworth Dixon happened to meet with one in a paper which he had bought in Gray's Inn Lane. He stood in the rain until he had read it through, and when, some short time afterward, an unpretentious book of verse, in paper covers, fell into his hands at the *Athenæum* office, Mr. Dixon remembered 'The Song of the Red Republican,' recognized the name of the author, and wrote the enthusiastic review which revealed to the larger domain of letters the existence of the poet. Mr. Massey had previously published, by subscription, a thin volume of 'Poems and Chansons,' in his native town of Tring, but it was 'Babe Christabel,' and other poems, which Mr. Dixon reviewed. It is pleasant to know that it was during a visit which the editor of the *Athenæum* paid to Douglas Jerrold, at Brighton, that the leaves of the book were cut—that the estimate which Mr. Dixon had formed of the caliber of the new poet was cordially indorsed by the great humorist, as was afterward proved by a review which appeared in *Lloyd's Newspaper*."

From this time Mr. Massey's position in literature was assured, and he could reckon among his friends men like Walter Savage Landor, and Thomas Aird, and Canon (then the Rev. Charles) Kingsley. It was, I believe, through the instrumentality of the latter (who, it may be mentioned parenthetically, no doubt had the poet in view when he delineated the character of the hero of "Alton Locke") that Mr. Massey was appointed Secretary of the Tailors' Association, a society established on *co-operative principles* to aid the amelioration of a class to whose abominable treatment public attention had at that time been drawn by Mr. Kingsley and others.

Naturally a reformer, he was aptly termed the "poet of the poor," the "poet of the people." Never a materialist, never a sluggish conservative, he obeyed the fierce impulsion of '48 in his own high way; thundered forth his denunciations of kingcraft and priestcraft; but through all his bitterness there ran a vein

of faith in the retributive justice of God. If he sang to the people—

"The palace-paupers look from lattice high, and mock your prayer;
The champions of the Christ are dumb, or golden bit they wear,"—

he also said to the oppressed—

"Cheer up, poor heart! thou dost not beat in vain,
For God is over all, and heaven above thee;
Hope on, hope ever."

If in his scorn he cried—

"Out of the light, ye priests, nor fling
Your dark, cold shadows on us longer!"

he also preached sermons, not to be slept over, from such kindling texts as this:

"Probe Nature's heart to its red core,
There's more of good than evil;
And man, down-trampled man, is more
Of angel than of devil.

Prepare to die? *Prepare to live!*

We know not what is living;
And let us for the world's good give,
As God is ever-giving."

It was no small matter, considering English culture, to leap at once to fame as did Mr. Massey. This, in a good degree, was owing to consistency of purpose in the line of progress and the exercise of a deep sympathy with our common humanity far beyond party in politics or exclusiveness in religion. "His political foresight was marvelous. He was never blinded by the professions of the late Emperor of the French, as Mrs. Browning was. As far back as the close of the Crimean war we find him pricking the bubble with words that Landor said Beranger might have written; and from that time to the end he continued to pelt the great 'empiric' whose downfall he had predicted from the first. In the light of the more conspicuous events of the American war, 'Nebraska' reads like a prophecy.

"At what age the poet married," says this English writer, "I do not know, but should judge him to have been twenty-two or twenty-three, while Mrs. Massey was probably a year or so younger. After their marriage Mr. Massey, who had already lectured to the John Street circle on literary and political themes, added mesmerism and clairvoyance to his then somewhat limited *repertoire*, and, with the aid of Mrs. Massey, afforded doubting audiences extraordinary glimpses of "the abnormal."

THE POET'S LITERARY CAREER.

Already has Mr. Massey accomplished an immense amount of solid, enduring work. "Craigcrook Castle" more than maintained the glorious promise of "Christabel," and drew from the critics an almost unanimous shout of approval. It was in this volume that the Crimean lyrics, as full of fire as the Republican songs of the previous volume, appeared, and "A Mother's Idol Broken." Mr. Massey was residing in Edinburgh when "Craigcrook Castle" appeared, engaged in the editorial duties of one of the Edinburgh newspapers, I quite forget which. It was while resident there that he became personally acquainted with the late Alexander Smith, with Sidney Dobell, and Hugh Miller. Part of his work there was a series of critical papers on the Manchester Art Exhibition, which Mr. Ruskin pronounced "entirely true."

The poet resided for a brief season in Wordsworth's country, in an elegant little cottage, occupied at present by Mr. John Ruskin, the art critic. Some of the passages in "Havelock's March" are in Mr. Massey's noblest style. Fully appreciating, he seized the earliest opportunity to express his sense of the many kindnesses conferred upon him by the late Charles Dickens:

* * * "Meanwhile he had taken a remarkably high position as a prose writer. He for some time supplied what is known as 'the social leader' of the *Daily Telegraph*; while his contributions to the *Athenæum* and the *Quarterly Review* have, I doubt not, been recognized by those who, through his lectures, knew what to look for. He has also contributed a number of brilliant papers on literary subjects to the *North British Review*. During Mr. Massey's connection with the *Athenæum* (which, I believe, terminated with Mr. Dixon's editorship), he was once, and only once, enabled to reveal the existence of a new and *obscured* poet as some years before Mr. Dixon had revealed his. The enthusiastic review of Jean Ingelow's first volume of poems, which appeared in the *Athenæum*, was written by him. It was my good fortune," says this English reviewer, "to be paying a visit to Mr. Massey, who then lived at Rickmansworth, when the parcel which contained Jean Ingelow's poems and Alex-

ander Smith's 'Dreamthorp' was opened. The first line of the poem—

'An empty sky, a world of heather'—struck his attention, and induced the pair of us to sit up until far into the night, or rather morning, until, in fact, every syllable of the verses had been read, and the foundation laid for the review I have mentioned. After the *Athenæum* had spoken, other journals echoed the verdict, as was their wont, and Jean Ingelow's poems passed rapidly through fifteen editions!"

MR. MASSEY'S PENSION.

It is doubtless known to most Americans that the English government pays yearly quite a handsome sum to that eminent author, William Howitt. So, "in 1863, Lord Palmerston granted Mr. Massey £70—or say \$350—a year from the small fund which is apportioned to such literary men and women as, from various causes, are deemed worthy of this kind of substantial compliment. Later, Lady Marian Alford, the poet's true and gracious friend for this many a day, gave him a house to live in rent-free, and thenceforward there was no fear of a visit from 'the wolf' he had been so familiar with in his youth. The dedicatory poem of 'Havelock's March' bears the name of 'Lady Marian,' in whose

'Ancestral tree's old smiling shade,
Spencer and Milton sang, and Shakspeare played.
I can not prophesy immortal fame,
And endless honor for my lady's name
Thro' my poor verse; but it shall surely give
All that it has as long as it may live.
She heard my children singing in the street,
And smiled down on them starry-clear and sweet.'

For 'all that it has' one might read the *best* that it has. Some years afterward the poet 'inscribed' his very finest poem 'to the Lady Marian Alford, on the death of her son, John William Spencer, Earl Brownlow, as the author's offering of sympathy in the common sorrow.' Mr. Gladstone read that remarkable poem while stopping at Ashridge, and at his instance a copy was sent to the Queen. Her Majesty wrote in reply as follows: 'The Queen returns the volume, having read and greatly admired the poem. She would indeed be most pleased to possess a copy of it.'

During all the vicissitudes, inverse and di-

verse, through which Mr. Massey has passed, he has kept a warm, sunny, and hopeful heart. This thought, connected with progress, ripples through these lines. Listen:

'Tis the voice of the future, the sweetest of all,
That makes the heart leap to its glorious call—

Hope, hope, hope!

Brothers, step forth in the future's van

For the worst is past;

Right conquers at last,

And the better day dawns upon suffering man,"

And then, again, these words sing themselves into all genial hearts:

"As the wild rose bloweth, as runs the happy river,

Kindness freely floweth in the heart forever;

But if men will hanker ever for golden dust,

Kingliest hearts will canker, brightest spirits rust.

There's no dearth of kindness in this world of ours;

Only in our blindness we gather thorns from flowers.

Oh, cherish God's best giving, falling from above:

Life were not worth living were it not for love."

THE POET'S APPEARANCE.

It is said that when the Italian artist, Titian, took the brush, he endeavored to produce a life-picture. This should be the aim of those who paint with pens. Seen stepping upon the platform, Mr. Massey is neither graceful in motion nor commanding in appearance; but the first uttered words indicate earnestness and sincerity. He is not so much of an Englishman but that he would readily pass for an American. He reads his lectures, and holds his audiences as Emerson does his, because he has something to say, and says it in language clear and terse. The temperament nervous, the eyes blue and mild in expression, rest in repose, unless animated in conversation, or touched by the inspiration of the hour, when they glow with a most speaking intelligence.

A lecture of his which was recently delivered upon the subject "Why does not God Kill the Devil?" produced a most telling effect upon the large audience. It is generally conceded that Mr. Massey handled the devil rather roughly upon this occasion. Here is a paragraph as reported in the *New York Tribune*:

"It is pitiable for you to pray to God for His kingdom to come on earth when you are doing all

you can to prevent it. You were sent here to work for that purpose, and the reason that it can not come is because you stand in the way, merely standing and praying with folded hands. The orthodox are responsible for helping the devil. These false beliefs have been utterly opposed to progress. Is Christianity Christ's likeness? Instead of that it is but a bastard Judaism. It is the apotheosis of self, each man hoping to save his cowardly self by the sacrifice of another. Christians get rich by grinding other people down, and then hope to be saved by another sacrifice made hundreds of years ago. You build comfortable houses for broken-down paupers to die in, but you leave them to come to this condition, breeding this disease which you treat so generously. Surely no human being has been so much misinterpreted as the man Christ Jesus. He came not to preach a sermon, not to write a novel, but to live a life, a life that is an example to us."

A lecture delivered in Association Hall, New York, and reported in several of the papers of that city, declares his views on "Objective Spiritualism." We quote from the *New York World*:

"Scientific Philistinism and orthodox impudence, having climbed nearly to the summit of the nineteenth century, will turn round and assure you that the whole phenomena called Spiritualism are an illusion of the sense and a delusion of the soul. As to the seers and visionists, not only did they not see any other world when they shut their eyes on this—not only were they pitiable, poor, blind beggars, whom all scientific men ought to rush at and 'give them two black eyes for being blind'—but they are charged with shamming their blindness. First, it is impossible to believe in them, because they were so blind; and next, we are not to credit them because they were such impostors as to sham their blindness. It is among the most uncultured races that we shall find a living record of a dead and buried past. How did the invisible world first make itself known to the early benighted cave-dwellers of the human mind? Answer: by becoming visible to them. It did not dawn from any sudden illumination within, nor wake up as a memory of immortality; was not born first as an idea at all. Conception did not precede the act of begetting. The first idea of man's continuity after death and the existence of a spiritual world was engendered, I am certain, by direct phenomenal and visible demonstration."

The speaker further said that Spiritualism "was the foundation, in fact, that the Christian faith was built upon. The first act recorded of Jesus Christ after his death and burial was that he rose again and revealed himself in person to his disciples. Of all men who preceded Christ of whom we have any record Socrates had the most placid and smiling assurance of immortality. He made no question of it; and why? He was in

daily receipt of revelation from the spiritual world by objective manifestations made to him through the attendant spirit, that spoke to him audibly and led him through this life with one hand reached out to him from the other. The earliest mode of manifestation recorded was that of gods, angels, spirits appearing to men in their own likeness, and this, Mr. Massey maintained, was the earliest form of revelation."

REAL SUCCESS.

LIFE is a struggle—how shall we meet it? By opposing force or gentle submission? There is a line between, I think, which might be divine.

To every day is allotted just so much that we must do. To neglect certain duties because they are unpleasant is but preparing ourselves for harder work in the future. It would, no doubt, be a help if we had some one to gauge our powers and say, "thus far shalt thou go, and no farther." As it is, there is a doubt as to whether we do not overestimate our capabilities, and thus lay up for ourselves disappointment. Still, we must ever give hope a place in the heart. The resolute and unflinching energy with which we take up the hardest work we have to perform, in itself confers on us a great and lasting good; the one who hesitates or draws back knows not his own loss. The future has always a possibility of success in store; we should cling to that, driving back the probability of failure that is so certain to hug us closely in its morbid grasp. We should be so well satisfied with the firm step that we have gained and can hold on the ladder of life, that we may calmly smile at those above us who may have outreached us, more by good-fortune than well-earned labor. We must learn to endure; in this world it is death to halt half-way; we must press on, never looking back. It is right to oppose certain forces which convict us of wrong, and show us plainly that we are yielding to weakness. We can never gain ground if we do not take a firm stand, and are not fearless of opinion. One's own mind must be his guide. Why do we trouble ourselves so much about what *others* think of us? Let us not cumber the

mind with needless trials, but give it ample space and room, in which to grow unfettered. While we may despise conventionality in our hearts, we can still make it of great use to us, and prove it a good weapon to fight the world with, only we must never hide from ourselves the truth, that it is the lesser light, not the great one, that moves our lives. Ambition has many uses, and should not be despised or discouraged. It makes life one grand battle-field, but it may be strewn with sweet flowers by the way, with which we may strengthen and refresh our panting souls. All grand emotions, passions, and desires should be cultivated and encouraged. What mighty powers are these to uplift, to regenerate, a cold and passive life! As we climb step by step, ambition keeps pace and refuses to be satisfied with present achievements, what we longed for in the past; now having gained it, we reach forth for more beyond, still unsatisfied. The spur of misfortune, or blighted hope, is sometimes the very thing to bring us success; the little troubles are annoying, wearing, but the *life-trial* can be made our starting-point on a new and brighter road. I believe many of us have not only dual, but triple, natures—one clearly marked out, the other one or two hardly understood or developed. The least, probably, being the most prominent, and taken for character. There is also a self-reliance which comes only when every available proof is taken away. Then weakness rises into strength, and fear ceases to tremble. But with the least sympathy vacillation and doubt appear again as enemies. Patronage is simply intolerable when extended to the proud, though wearied, heart;

it burns with the fire of grief and anger mingled. One can accept what is their due, but to humbly sue for favor earned is but gathering in insult. Feeling has no footing in the world, nor place in its creed. Indeed, the absence of it seems to give a charm to its votaries which they all seek to win. A cold, relentless heart can easily win the victory, and bear it in triumph from the pure and trusting. We need two schools, one of the world and one of the heart—the one, policy; the other, impulse. One to make us of use to others; the other to benefit ourselves—but they should be perfectly and evenly balanced. There is nothing gained by hurrying; the best work, intended to last, is done slowly; and even if we could accomplish wonders by this nervous speed, if we are ourselves worn out, where is the actual gain? The fountain-head must not give way. Quiet intensity, steady and controlled passion, these are great powers in this world; but with what a strong hand must the rein be held, or we may be overmastered! There is a rest which seems mere idleness, but it brings strength. There is a stupor of soul which beguiles into inactivity, which weakens the mind and body as it grows; and perhaps there is but a step between the two.

Enforced idleness, where there is much to be done, is anything but rest or quiet. It is harder to wait than to work; it is heart-sickening to dream but never wake to the reality. But strive we must, or give up all supinely. Who can but admire a strong nature, whose pulses throb, perhaps for evil, though they might for good? How sad the sacrifice when one of these dooms himself to destruction! Success in life is a thing we may boldly take hold of if the first steps are taken on firm and unyielding ground. In the first place, we should have a principle to mark our path; to this we may add the stepping-stones of patience, courtesy, and good-nature, and we must not forget that politeness is a lever that moves the whole world: if we look for a weapon of gigantic strength we here have found it. Toward the poor and uneducated its power is mysterious, since they have no means of analyzing or proving its source. To the refined and cultivated it marks a broad platform upon which the merest strangers may meet in pleasant

companionship. A broader feeling of brotherhood among men, a giving up of this innate selfishness, which is so prominent among us now—only this will give an impetus to life and make success worth striving for. When we struggle for the mass of people, the victory will be dearer than when only won for ourselves alone. But despair and doubt are things that should not be thought of in conjunction with life. We are here to labor; let us do our work with happy minds and free hearts. Let us struggle against unbelief, skepticism, loss of faith in human nature. If deceived a dozen times, let us still keep a glad freshness of heart rather than succumb to the torpor, the inanity which suspicion creates. Let us believe there is some good in everything to the very last.

ARCTIC EXPLORATIONS.

WHETHER we may ever reach the North Pole is a vexed question. That there are many who believe in an open Polar Sea is a fact. How to reach it puzzles navigators. Already some thousands of treasure, and not a few valuable lives, have been sacrificed in the enterprise, and what have we gained? Only failure, so far as the special object is concerned; but we have learned much of arctic geography, arctic life, human and animal.

Is there an open polar sea? Is there a channel through which it may be reached? What is the condition of things at the North Pole? Wild geese and other birds are believed to be abundant there; so of fish. But are there human beings there? It may be another race may be found there, the "connecting link," perhaps, for which Mr. Darwin has been searching so long. Except in the cases of Sir John Franklin, Dr. Kane, and Dr. Hayes, the explorers have not been the right sort for such work. Enthusiasm does not imply good judgment in a man. We may put our money and our trust in such a man as the late Captain Hall, but it is likely to prove an unfortunate investment. Captain Hall was not the man for the place, and those in authority ought to have discovered it. He was an enthusiast, and ambitious to do that which gives notoriety. In organization he was low and coarse. In spirit and temper

he was either kind or cruel, according to his moods and surrounding circumstances. His nature was essentially sensual, and he did not sufficiently restrain or regulate his impulses. He was not sufficiently educated for the position he assumed. Instead of being the hub, he was fit only for a single spoke in a wheel. He should never have been intrusted with any such great responsibility as that in which he lost his life, and imperiled the lives of so

many others. We respect his aspirations, but deplore his overestimate of his own abilities and qualifications.

Should future exploring expeditions be fitted out, let us hope that a thoroughly competent man may command it, and that a picked crew may be selected to help work out its objects to a successful end. With "the right man in the right place," we may still hope to reach the North Pole.

Physiognomy, or Signs of Character.

Of the soul, the body form doth take,
For soul is form, and doth the body make.—*Spenser.*

ANALOGOUS EXPRESSION IN MAN AND ANIMALS.

AN eminent divine, whose knowledge of human nature is not exceeded by his masterly eloquence, has said, that man is a combination of all the known animals. The accuracy of this statement will scarcely be doubted by any close observer, whether he be a disciple of the Development theory, or a stubborn coadjutor, in opinion, of Agassiz. But however little may have been our associations with others, the most of us have not failed to detect now and then expressions of character which instinctively have suggested some brute, in whose disposition and habits are found analogous traits.

It is not alone in the sphere of the base or reprehensible qualities that we discover these resemblances between the human and the brute, but also in the realm of those noble qualities which dignify manhood or womanhood.

While harshness and ferocity are conspicuous in the nature of the wolf, cunning in the cat, malice in the hyena, deceit in the ape, affection is equally discernible in the lamb, watchfulness in the dog, patience in the horse, gratitude in the lion.

The silly, meek-faced sheep, the long-eared, braying donkey, and the gabbling duck have furnished convenient illustrations for flippant tongues from time immemorial, and yet the fling which wounded feeling conveys through them to-day is fresh enough to exasperate us. The poet of ancient Greece or Rome found in the bee and the ant apt

symbols of persistent industry, and to-day the poet and economist still find striking lessons in the habits of these insects.

There are men whose names gleam brightly on the page of history who have not been too proud to acknowledge how much they owe of their success to the accidental or designed contemplation of some insignificant creature. Lessons in architecture have been taught engineers by the honey-bee, the swallow, and the spider; and examples of patient



Fig. 1—CAT-MAN.

perseverance and ingenuity by insects which are regarded by the masses with disgust. In view of these facts we can obtain some clew to the zest with which observers in natural history give themselves up to the investigation of some one class of animated organ-

isms, finding newer wonders as they advance in their examination.

THE CAT-FACE.

Dogs and cats are among the animals most familiar in every-day life, and it is but natural that we should give particular attention to them in this purposed discussion of comparative physiognomy. The cat-class of facial types is large. We meet men and women in whom the feline characteristics are prominent in the walks of what we term good society. Their heads are broad between the ears, and above and backward of the ears where the organs of Destructiveness, Secretiveness, and Cautiousness are situated, and relatively low in the crown, while the perceptive organs predominate considerably



Fig. 2—CAT-WOMAN.

in the intellect. The voice of the cat-man is low and blandishing; his movement graceful, undulating and quiet. His language is not distinguished by directness of statement; rarely does one hear him utter an opinion roundly; but he usually speaks in a deprecating way as if in apology for saying anything in addition to what you may have asserted. He reflects your notions of things, and so seeks to establish himself in your good opinion. But the cat nature now and then crops out; the claws protrude from their furry sheaths. Most indirectly and most unintentionally, of course, and at times when the occurrence is most objectionable to

you, he lets slip bits of confidence which sharply wound you. But he is so innocent,



Fig. 3—TWO RATS.

so meek, so sorry for his "mistakes," that you feel obliged to pass over the distressing incident as altogether accidental. Matters may go on between you and the cat individual in this way for years, when all at once you wake up one day to a realization of his true character; that under the bland mantle of dissembled friendship he has insidiously plotted to destroy your reputation in the very "house of your friends," and now, with his habitual dissimulation, inwardly chuckles over your embarrassments and grief.

The expression of the features in the second illustration betokens such a character in a very striking degree; it combines the elements of cowardice, caution, cunning, and malignancy. A person so organized would be likely to embrace fitting opportunities not only to poison a trusting friend's reputation, but even his body, and find secret delight in both his mental and physical torture.

THE RAT-FACE.

Rats in human form and outward semblance cross our path, but it is not often that they meet us in the broad street, on the open, sunlit avenue; they burrow in the close, dark alleys, amid the noisome odors of filthy habitations, and the foulness of old cast-off garments. "Sneak" is written upon their foreheads, and is legible in the outline of the protuberant nose and sharp chin, while their thin, hungry fingers fitting accompaniment of excessive Acquis-



Fig. 4—THE FOX.

itiveness, are extended as if ready to pounce upon anything which may appear. We need but point to the illustration wherein the portraits of the man and the rodent strikingly show their close relationship in the more manifest traits of character.

THE HUMAN FOX.

Leaving the rat and his human analogue, let us turn to the next illustration. How sly and covert those half-closed pupils and that grinning mouth! We are reminded, as we contemplate these features, of the familiar



Fig. 5—THE ROUÉ.

fable of the fox and the crow. There is much speculation in those eyes with reference to ways and means for getting what their owner covets. How he chuckles to himself as some scheme floats upon the surface of his vacillating mind which promises rich booty in its practical consummation. He-he-he, already the treasure is within



Fig. 6—OLD HEN.

the clutch of his greedy imagination. The sly fox is engraved upon those features.

COMPOSITE FACES.

Some faces combine the expressions of several animals even as their characters have in them elements which correspond with those expressions. The face in figure 5, in youth, might have been prepossessing, probably was, but, with the growth of years and the perversion of improper habits and practices, its tone has become more and more impaired, until now there are but few traces of the harmony that once marked it. See therein the crabbed disposition and rapacity of the wolf, the watchfulness of the vulture, and the indifference of the owl. The forehead yet retains the stamp of intellect; the eyes still show a ready discernment, and the nose is marked with superior executive ability. And though gleams of a nature adapted to better ends occasionally flash out, the talents in him are subordinated to selfish and mean purposes. The nose has acquired a vulture look, and overspreads the face with the shadow of rapacity.

THE HEN.

"Fie, fie, unknot that threatening, unkind brow,
And dart not scornful glances from those eyes."

Thus Shakspeare, and we can with all propriety apply the exhortation to the prominent figure in the picture now before us (fig. 6). Methinks we hear her repeat for the hundredth or the thousandth time to her poor, truckling, hen-pecked man, who, perchance, with stammering tongue and pale lips, has attempted to raise some rather small remonstrance to her willful domination, "Though I am your wedded wife, yet I am not



Fig. 7—A DONKEY.

your slave, sir," and then pour forth such a steady stream of complaint, objurgation, and reproach that the confounded husband is glad to make a hasty retreat from the house, leaving the shrew victorious once more.

What an old hen the picture presents! She can cackle, cackle, cackle, and if need be "crow"—mistress and man in one. Had she for a husband such a man as figure 7, we would plead in extenuation of her conduct toward him; for all the donkey in that face

would exasperate a wife having good claim to mildness of temper.

THE APE.

Of course Darwin comes in for his share of favor and apparent support in these ex-

emplifications of the lower animals in man. However repugnant to our sentiments, the fact is nevertheless too obvious to be shirked, with anything like consistency, that there are persons asserting all the privileges of human beings who are in face and manner very like unto monkeys. We find them in our best parlors arrayed in all the glory of well-starched shirt-fronts, glittering watch chains, and gorge-

ous neckties. The type we furnish is at once recognized as having all that "mold of form" which constitutes the "glass of fashion," the dandy of true blood. Speaking of the author of the "Descent of Man," we would be almost afraid to place his portrait in close contiguity with our quadrumanous friend, the ape, lest we should be charged with libeling either the great author or the beast. Suffice it to refer to the back numbers of the PHRENOLOGICAL JOUR-



Fig. 8—THE MONKEY.



Fig. 9—THE PIG.

NAL for 1868 for a truthful portrait of the advocate of the Development theory.

THE HOG-MAN.

One class of faces, with which all are very familiar, is distinguished by its marked homogeneity of expression. The whole tenor

of the features is low, coarse, and vulgar. The owner of such a face finds his highest enjoyment in the indulgence of the sensual appetite, and that to excess.

He does not understand the significance of the term moderation, but, like the quadruped whose name is associated with extreme gluttony and reeking filth, and yet of whose soggy flesh many professing Christians persist in eating—despite the Mosaic prohibition—he gobbles, gobbles, gob-



Fig. 10—EAGLE.

bles, and drinks, and drinks whatever is edible or drinkable, irrespective of quality, whatever may feed his indiscriminate voracity. We recognize his face (fig. 9) without special direction from others; the hoggish aspect is too conspicuous. Strange that human beings will deliver themselves up to habits which they know must render them objects of contempt to the refined and decent!



Fig. 11—CUVIER.

There is no reproach in a resemblance to some of the higher animals, those for which we entertain respect, as the horse, or the lion, or the graceful deer. Men great in character and powerful in influence are often compared with the lion. Daniel Webster had much of that royal beast in his nature and physiognomy. A gentle and winning person is sometimes compared with a lamb, or fawn, whose trusting confidence has been the subject of more than one beautiful poem. Among men of marked intellectual acumen, especially those of professional culture, we

find a type of face which reminds us of the eagle. Figure 10 shows this configuration in a somewhat exaggerated degree. Cuvier, the naturalist, and Tristram Burgess, the eloquent American advocate, possessed it. With what sharpness of perception did the latter penetrate the designs of opponents, and with what impetuous swiftness he pounced upon and tore into shreds their fallacious reasonings!

DOGGED FACES.

We speak of dogged obstinacy, having in mind the well-known traits of the bulldog. The facial outline of the prize-fighter



Fig. 12—POODLE and rough furnish ready specimens expressive of such brutish characteristics. The square, retreating brow, massive cheek-bones, broad chin, great jaws, large mouth and protruding lips of the ancient gladiator represent the type as truly as the modern Tom Cribb.

Here you will find a great open-countenanced, large-eyed fellow, who reminds you of the good-natured mastiff; there you will find a grizzly, unkempt, laborious son of the

fields, who brings to your memory the Scotch shepherd colie.

The dapper little fellow, with sleek hair and curley beard, with insignificant nose and mouth quite hid beneath his luxuriant moustache, suggests the well-fed, lazy poodle; while another has the crusty, vicious look and air of the irritable terrier.

Thus briefly have we indicated some of the types of animal physiognomy as they occur in society. What there is of human in us is the better part, the noble and elevating, while the brutish is the lower or animal part, susceptible of corruption and degradation, and so capable, as is too often demonstrated, of dragging down the whole man into shame and dishonor.

But, happily, this unfortunate sequel in the drama of life does not belong to true human nature, for the man who listens to the voice of that spirit within him, that afflatus which tells him he was born for a different purpose and a higher destiny than the dumb animals around him, develops into a nobler type of humanity, and by his walk and conversation demonstrates his relation to a higher power, and is in the meridian of his manly powers "crowned with glory and worship."

HAL. D. RAYTON.

AN ARTICULATION SCHOOL FOR THE DEAF AND DUMB.

IN a somewhat obscure corner of Connecticut is a growing institution of which I think the readers of your excellent JOURNAL will be glad to hear. About a mile and a half from the united villages of Mystic Bridge and Mystic River is "Whipple's Home School for Deaf Mutes." The house, a very pretty building, first intended as a country residence for a wealthy family, is situated on a high elevation, commanding a view of exceeding loveliness. Mystic River, with its picturesque shores, the beautiful cemetery on its further bank, the village, which derives its name from the river, and is built upon hillsides and in valleys, a wide sweep of fields and woodlands, and a fine view of Long Island Sound may be seen from the front of the house. Back of it is a grove of junipers and rocks innumerable, which, though they may not add to the value of the place for farming purposes, yet do not detract from its wild beauty. But the interest of the

place is the work that is carried on within the walls of the building. At the present time the school numbers seven pupils. Two of them are a young gentleman and a young lady, who lost their hearing at the ages of ten and thirteen, and can talk, but are merely trying to learn to read the lips of others, and thus be able to understand ordinary conversation. Three of the others were congenital mutes, and two lost their hearing after they had learned to talk, but spoke very imperfectly at the time of their entrance into the school.

HISTORY OF THE INSTITUTION.

The origin of the school is as follows: About forty-eight years ago Johnathan Whipple, grandfather of the present teacher, had a son born to him who proved to be deaf. He became old enough to talk, but did not try to speak a word until his father, who possessed a very investigating turn of mind, discovered that the child would never make an effort to imitate

speech except when looking at the mouth of the speaker.

At that time Jonathan Whipple had never heard of the articulation schools in Germany, and as the science had never been taught in this country, the idea was entirely original with him. He commenced by requiring the child to look at his mouth and repeat words slowly spoken, until he could articulate them plainly and understand them. In this way Enoch Whipple, now one of the most intelligent men of his native town (Ledyard), learned to talk. His old grandfather was wont to say to Enoch's father, "Jonathan, if you hadn't been a remarkable man your little boy would have been deaf and dumb."

ANECDOTES OF ENOCH WHIPPLE.

It is truly wonderful to see the facility with which he understands and converses. A stranger might be in his society for days, and as long as he looked him in the face while talking he would never suspect him of being deaf. I will cite a few instances to show his proficiency in the art of lip-reading.

During the winter he follows the occupation of butchering, and is employed within a circuit of a good many miles. He was one day working at a distance from home when he cut his finger, and went into the house to get it wrapped up.

There were two women in the room when he entered, and instead of speaking he simply held up his wounded finger with a smile. The lady of the house knew that he was deaf, and naturally supposed him to be dumb.

With much sympathy she found a piece of cloth, and wrapped up his finger. While doing so she remarked to her companion that it was a pity that this poor deaf man had cut his finger so badly.

What was her surprise when, with a perfectly natural tone and accent, Mr. Whipple, who read her lips, said, "Never mind; accidents will happen!" The woman afterward said that she came near fainting, for she thought he spoke for the first time in his life.

Another time, when he was driving around with a butcher's cart, he stopped at a house and asked the lady if she wished to purchase some meat.

She went out to the cart to make a selection, and while there asked him some question, but as she wore a long sunbonnet he could not see the motion of her lips plainly enough to understand what she said. He asked her to repeat her question, and without thinking of its being a rudeness, stooped to look into her face.

The woman, not knowing him to be deaf, was much offended, and, without making a purchase, turned and entered the house. He thought she had forgotten something, and waited awhile for her return, but as she did not come he drove on. A little distance from the house he saw the woman's husband, with whom he was acquainted, and the latter asked him if he sold any meat at the house.

"No," was the answer; "your wife spoke of buying some, but did not."

Thereupon the man bought some meat and took it to the house.

"Did you get that of that saucy butcher?" inquired the man's wife, indignantly, as he entered.

"Saucy! Why, that was Mr. Whipple, one of the likeliest men in town. Why do you call him saucy?"

"Because he looked into my face when I went to speak to him."

"Why, he is deaf," said her husband, "and can not understand a word unless he can see your mouth."

When it was explained to her she felt as though she was more saucy than he, and afterward apologized.

He says that when people speak loudly they articulate more plainly, and when strangers with whom he is conversing speak with mouths half shut, he sometimes tells them he is deaf. They then raise their voices, thinking to make him hear, and in so doing open their mouths, thus giving him a better view of the organs of speech.

One day he was shingling the roof of a house when a man went by, and seeing him there asked him the way to a neighboring place. The man scarcely looked at him, and though he knew by his stopping that he was saying something, he could not catch a word of it. Putting his hand to his ear in a listening attitude, he said, "Please speak a little louder; I'm hard of hearing." The man then turned straight toward him and opened his mouth, and though Mr. Whipple heard not a breath of noise, he answered his question without difficulty.

When he was quite a young man he had occasion to make a journey. Part of it was performed in a stage. As he was very sociable and well informed, the stage-driver seemed to be much interested in talking with him. They rode together nearly a whole afternoon, and never once did the stage-driver suspect that his companion was deaf. As it began to grow dark, however, the truth had to be revealed,

and never was a man more astonished than was that stage driver to find that he had been conversing for hours in his natural tone of voice with a deaf man.

Many more circumstances might be mentioned to show how perfectly he is master of the art of conversation and reading of the lips, but these must suffice.

JONATHAN WHIPPLE'S OTHER EXPERIMENTS AND EFFORTS.

After the experiment proved thoroughly successful with his son, Jonathan Whipple used to wonder why other deaf people might not be taught language in the same way, and he tried a number to see if he could make them speak. The effort was successful in every instance as far as it went, but circumstances did not permit of his carrying it to any extent in other cases.

The idea remained in his head, however, and he often spoke of it to friends and strangers, and expressed the wish that he might start a little school and take a few pupils to experiment upon, that he might prove the feasibility of his method in others besides his son. Owing to the skepticism of the people, and the determined opposition of the teachers of the sign language, he found it impossible to gain any public recognition. Meanwhile the subject was beginning to be agitated in various parts of this country. It was becoming known that articulation and lip-reading had been taught to deaf people for more than a century in Germany, and many, too, had heard of Enoch Whipple and his wonderful perfection in the art, and in 1867 Jonathan Whipple received a letter from some of the prominent educators in Boston asking him to give them a detailed account of his method of instruction with his son. He did so, and thus helped in founding what is now the Clarke Institution in Northampton, Mass., and the Boston day school for deaf mutes, in both of which the system of instruction is articulation.

AN OLD PUPIL.

In the winter of 1866 Jonathan Whipple received a pupil, a young man twenty-one years of age, and kept him under instruction one hundred days. He could talk none at all when he commenced, but when he went away he could ask and answer questions, and, in fact, converse on a small scale with those around him.

In 1868 a little girl, seven years of age, was brought to him for instruction, and it was with much disappointment that he found himself, on account of the debility of age and the loss

of his teeth, which very much marred the perfection of his speech, unable to take the responsibility of teaching the child, therefore he applied for aid to his young grandson, Zerah C. Whipple, then about nineteen years of age.

The young man had not the slightest idea when he commenced of making this a permanent pursuit, but his success was so remarkable that he began to grow much interested in the work.

The little girl learned very rapidly, but, unfortunately, she was taken away after about seven months' instruction and placed at the asylum in Hartford, where the expense was less on account of the aid which that institution received from the State.

PERSEVERANCE—BENEVOLENCE.

Zerah Whipple was not satisfied to give up without making another experiment, now that he had discovered what he could do in the line of teaching deaf mutes, therefore he put forth every exertion, aided by his parents and grandfather, to obtain more pupils. He had nothing to show for his labor, but he tried to make his desire for business known by writing for literary papers, and getting friends to speak of it for him whenever opportunity offered.

His grandfather wrote occasional articles for the press upon the subject, and one of these fell into the hands of a wealthy gentleman in Wilmington, Del., Samuel Downing by name, who had a little deaf son. This gentleman had never heard before of the possibility of teaching the deaf to speak as hearing people do, and although very incredulous in regard to it, he felt enough interest in the matter to make a trip of investigation to Connecticut. There he found a family of honest-appearing people in very moderate circumstances, with no school and no prospect of any at that time, but he saw Enoch Whipple, conversed with him, and found that although he was as deaf as his own son, he yet could talk as well as common people, and could understand with the greatest facility the lips of those conversing with him. Mr. Downing went home, indulging a warm hope that his little son might some day become a talker like Enoch Whipple; but when he communicated the idea to some of his friends, in whose judgment he had much confidence, it was received with so much skepticism and even ridicule, that for a time he wavered in his purpose of sending his child to the Whipples for instruction.

A RICH PUPIL, WILLIE DOWNING.

Parental love, however, triumphed. He felt that if there was a possibility of his little boy

even learning to talk, it was his duty at least to make the trial; therefore, despite opposition, in November, 1869, he took his little boy to Connecticut, and left him in the Whipple family for a three months' trial, in which time he thought the system of instruction might be tested.

Willie Downing was a congenital mute, eleven years of age. He not only had never spoken a word, but he had no idea of language, and did not even know that the most common objects had names. All this it was necessary to teach him, and the work was begun with the most faithful and pains-taking persistency by the young man who acted in the capacity of teacher.

For a year and a half Willie Downing was Zerah Whipple's only deaf pupil, but his progress was so astonishing that when he went home on his first yearly vacation, the people who had caviled at the idea, and ridiculed his father for thinking he could learn to talk, were struck with greatest wonder when they heard the child, whom they had known as a deaf mute, speak words plainly, spell, count, and answer simple questions.

THE METHODS FIRST EMPLOYED.

At first the method employed was very laborious: it necessitated such constant repetition of words. The pupil was required to look at the teacher's mouth and repeat after him the word to be learned, placing his hand upon the teacher's throat to get the sound, until he could repeat the word correctly. So much talking was required on the part of the teacher that it suggested the idea to his mind that if a system of representing sounds by writing symbols could be devised, the work could be made far easier, and, moreover, a class might be taught with much greater facility.

In the summer of 1870 Zerah Whipple first commenced a study of the position of the organs of speech in the articulation of sounds, with a view to representing them by written symbols.

At that time he had never heard of Mr. Bell's "Visible Speech," which has since become quite popular in the articulation department of several of the schools for the deaf.

By careful and laborious study he succeeded in working out the basis of a system which he has since utilized to a great degree in the instruction of his pupils.

ZERAH WHIPPLE'S SYSTEM HIS OWN.

In the autumn of 1870, before his system was completed, he first heard of Mr. Bell's "Visible Speech," but he made no use of that

system in working out his own, as some have unkindly said regarding the new method which Mr. Whipple is employing with such great success in his school at the present time.

Mr. Bell, himself, who has seen this new system, says that it is very different from his own, and exonerates Mr. Whipple entirely from any charge of plagiarism.

It has been copyrighted under the name of "Whipple's Natural Alphabet," and since its introduction in the school it has proved of more value in lessening the labor of the teacher than the services of the most competent assistant.

ITS NATURE.

In this article it will be impossible to give a detailed description of the system. It is intended to represent pictorially the positions of the organs of speech in the utterance of every sound, and is so simple that Mr. Whipple's youngest deaf pupils understood it at once.

It is marvelous to see how readily they read and write it. The youngest pupil in school is a little boy seven years old, who has had less than two years' instruction. Another is a little girl ten years of age, who has been under instruction about a year. Both can readily read the most difficult words when written in this system, and give the correct pronunciation.

The system has as yet become but little known, as its originator felt anxious to prove its utility thoroughly in his school before making it public, and he has done so to his own satisfaction and the satisfaction of all who have seen its workings among his pupils.

Among those who have seen and highly approved of it are Hon. Wm. H. Potter, of Mystic River, Conn., Member of the Board of Education of Connecticut; Prof. J. K. Bucklyn, Principal of Mystic Valley Classical Institute, Mystic Bridge, Conn.; and Prof. B. G. Northrop, Secretary of Connecticut Board of Education, New Haven, Conn. The only perfect printed copy of this system is in the annual report of the Board of Education of Connecticut for 1873.

A STATE SUBSIDY.

In 1872 an act was passed in the State Legislature to allow the Whipple School the same appropriation per year for each pupil as is given to the institution at Hartford. Three of the pupils belong in Connecticut, and receive the aid from the State at the present time. Every pupil in this school is bright and intelligent, and those who are interested in progress may derive much pleasure in visiting it and listening to the exercises of the deaf children.

SHADOW READING.

One of the experiments with which Mr. Whipple entertains company in the evening, and which serves to show the proficiency of his pupils in lip-reading, is to request them to read from the lips of a shadow on the wall. A person who speaks plainly sits in a position to show the outlines of the mouth, and the pupil stands behind his chair and reads his words from the shadow. It is quite an easy matter, but seems marvelous to one who has never seen it before. One evening, in the presence of company, Mr. Whipple desired a young man who is studying lip-reading to try if he could read the shadows, but as he had only been under instruction about two weeks he had no confidence in his ability and declined to try. The teacher then called on one of the younger pupils who had had more practice, and when the shadow was clearly defined on the wall the young man looked on with curiosity, for it was the first time he had seen the experiment tried. As the teacher spoke the words slowly, he then repeated them from the

shadows with scarcely a mistake, much to his own surprise and the amusement of the company.

THE WHIPPLE APTITUDE.

The Whipple family are well calculated to carry on a school like this. Zerah Whipple lives in the house with his parents and grandparents, making, with his infant daughter, four generations under one roof. Jonathan Whipple, Sr., now in his eightieth year, though physically debilitated, retains his mental faculties wonderfully well, and enjoys relating to sympathetic visitors the experience of his early labors and the unappreciation of a skeptical public. Jonathan Whipple, Jr., and wife, Zerah's parents, are called father and mother by all the pupils, from the oldest to the youngest. He is assisted in teaching by other members of the family. The children seem perfectly contented and happy, and the school is truly a "Home School" in every sense of the word. Those who have deaf children to educate would do well to communicate with its proprietors, whose address is Mystic River, Connecticut.

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

HOOSAC TUNNEL.—No. 1.

BY REV. LUCIUS HOLMES.

MAN naturally takes a lively interest in any stupendous work or great achievement of his race. Hence, visitors are constantly thronging wherever may be seen the utmost that art and science have accomplished. Men go a long distance to be permitted to look only upon the ruins of what was once useful and magnificent; and those detained from travel want to read, and the travelers themselves love to peruse, accounts of structures and contrivances which glorify the thought, the skill, and energy of human kind.

It is with confidence, therefore, that I attempt to write of the Hoosac Tunnel, knowing that if I only do passable justice to my subject-matter, I shall secure the gratitude of my reader; for this is the most difficult and surprising undertaking ever attempted upon the American continent. What led the way,

we instinctively inquire, to this stupendous enterprise?

ITS HISTORY.

Every intelligent person knows that Boston is the metropolis of New England, and that its geographical position, notwithstanding political divisions, renders it a sea-coast trade-center for Canada, New Brunswick, and Nova Scotia. Two aspirations must be common to it: a desire to augment its ocean commerce, especially with Europe, and to increase its trade with the West. Its ambition, too, would be naturally stimulated to compete with the largest city of the western hemisphere, New York. Moreover, it is clear the interests of Boston and of all New England are the same in respect to having the best and amplest thoroughfares to all the States West. It is in keeping with all these great facts, that almost fifty years ago (1825)

the Legislature of Massachusetts should appoint a Board of Commissioners, to be assisted by an able engineer, Mr. Loami Baldwin, to ascertain the feasibility of constructing a *canal* from Boston even to the Hudson River. The idea of a *railroad* was not then in the mind of the Legislature. But it happened that this very year the first railroad for carrying freight and passengers in the United States was put in operation.

Now, that every reader may the better understand what is about to be related and described, we will do a little free sketching.

The Board of Commissioners referred to examined two routes: one, the southern, by the way of Worcester, Springfield, and the Westfield River; and the other, the northern, *via* Fitchburg, Miller, and Deerfield rivers—North Adams being common to both routes.

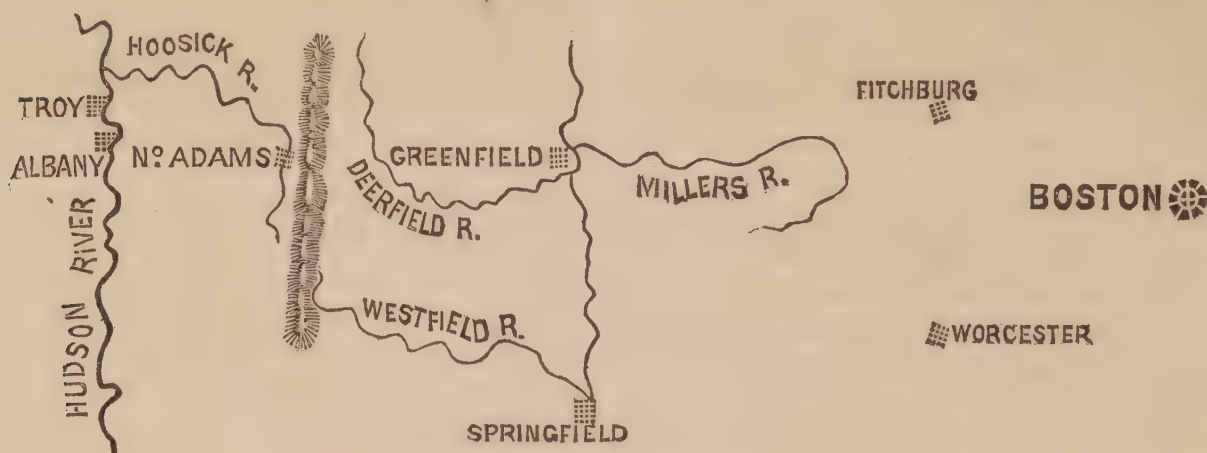


Fig. 1—Sketch of Railway Routes.

In their report they said, "There was no hesitation in deciding in favor of the Deerfield and Hoosac River route." They looked to find some way *around*, but the mountain meeting them always, they boldly declared for *tunneling* it, that the canal might go *through*. Thus a conception was begotten and nurtured, which was finally to be fully realized, though under a modification of purpose.

The steam, smoke, and jar of the railroad arresting universal attention throughout the Union, caused the canal project to fall out of sight. What next? In 1828 another commission reported in favor of going *over* the mountain with cars, and in 1842 the Boston and Albany line was opened. The grade between Springfield and Pittsfield, however, is very heavy; beside, it is some forty miles further "from the Hub to the Hudson" on this than on the tunnel line.

A shorter, easier, and competing route was to be found. The first section of a road was opened to Fitchburg in 1845, and soon after the Vermont and Massachusetts Railroad was begun, which reaches from Fitchburg to Greenfield.

"As early as 1848 the Troy and Greenfield Railroad Company was incorporated by the Legislature, with a capital of three million five hundred thousand dollars, and was authorized to build a railroad 'from the terminus of the Vermont and Massachusetts Railroad at Greenfield, through the valleys of the Deerfield and Hoosac to the State line, there to unite with a railroad leading to the city of Troy.' " *

It was known that by following up the Deerfield River a road could be constructed from Greenfield to the east side of the mount-

ain, without much extra labor, notwithstanding it passes through some very wild scenery as it approaches the Hoosac range. And then on the west side of the mountain, through North Adams, the Hoosac River goes between Mount Adams on the right and the Saddle Mountains on the left, and further on it flows between the Tayhkanic Mountains on the left and the Green on the right, and yet further there is a fine and comparatively open country. Mainly along the beds of three rivers, then, the Hoosac, Deerfield, and Millers, the rails could be adjusted with no unusual obstacles to overcome from Troy to Fitchburg, save this stubborn spur of the Green Mountains, denominated Hoosac. The rails are down to Greenfield, and in use; but as to the rest, delay.

* "From the Hub to the Hudson," by Washington Gladden, pages 86, 87.

The road from North Adams to Troy is in operation. The trains run to the east side of the mountain, but travelers go over the mountain yet in those splendid six-horse coaches, enjoying the bracing air and splen-



Fig. 2—EAST PORTAL.

did prospects. It is, however, an almost thrilling fact that at this writing, Mr. Shanley, according to his prediction, that he would be able to walk through this ancient mountain before December, 1873, completed the opening on Thanksgiving Day.

We have been too much in a hurry, and



Fig. 4—CENTRAL SHAFT BUILDINGS.

must go back a little, promising to hasten and skip some connecting links, etc., so as to be really through this general history soon.

In the year 1854 the commonwealth loaned its credit to the Troy and Greenfield corpo-

ration to the amount of two millions. Under this act work was begun the next year by E. W. Serrell and Company. In 1856 a new contract was made with H. Haupt & Company, who were to have \$3,880,000 for com-

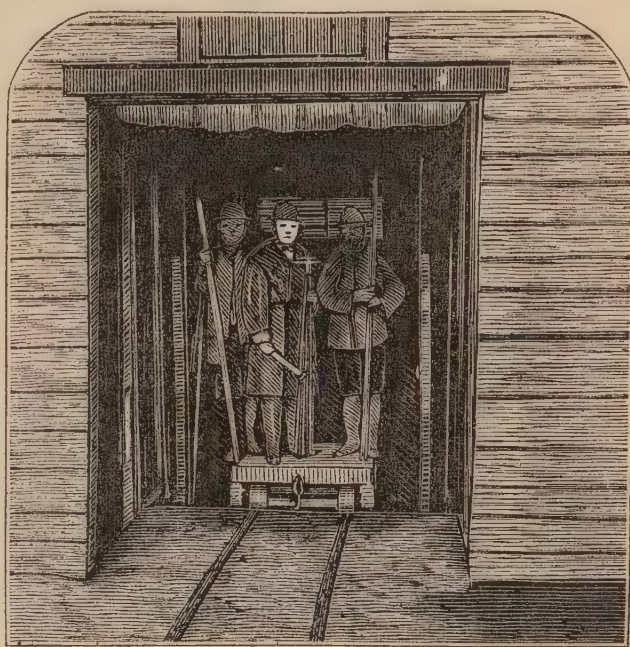


Fig. 3—GOING DOWN SHAFT.

pleting the road on each side of the mountain, and for "doing" the tunnel. "Excavations were made at each end of the tunnel, and in 1858 the western section of the road was completed to the State line, connecting North Adams with Troy." In 1862 the State received into possession the road, tunnel, and



Fig. 5—WEST PORTAL.

all that belonged to the Troy and Greenfield Company. Work, which had been suspended, was resumed under Commissioners and the superintendence of Mr. Thomas Doane. In 1868 the Legislature appropriated

\$4,750,000, contracting with Messrs. F. Shanley & Brother, of Canada, whose portraits are given herewith, to have the tunnel strictly finished, with track laid from side to side, by

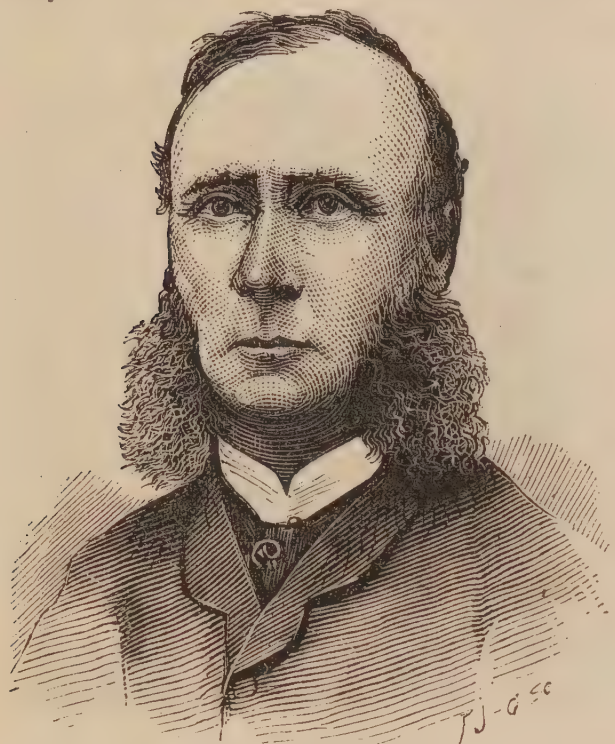


Fig. 6—FRANCIS SHANLEY.

March 1st., 1874, a bargain the Shanleys are likely to make good.

THE WORK ACCOMPLISHED.

In describing the magnitude and difficulties of the undertaking, we shall also be enlarging upon its history. We present another sketch, and now of the mountain itself, and as we at the present time contemplate it.

It is, then, 25,031 feet through the mountain, or a little more than four and three-quarter miles, and the tunnel at the central shaft even is 1,028 feet *under ground*. It is the longest tunnel in the world except Mount Cénis under the Alps, between France and Sardinia, which is more than seven and a half miles long.

It was according to the original plan, which has been adhered to, to construct the tunnel wide enough for two tracks, and of ample height. It is, accordingly, twenty-six feet wide and twenty-two high. Toward the central shaft the grade rises twenty-six feet to the mile both ways, so that the water may settle toward each portal from this point. Out of the west portal there now rushes a stream of water, along a ditch prepared for it, large enough to work an old-fashioned grist-mill.

One can not muse upon the idea of making an opening through such a mountain, or visit the tunnel and behold the work accomplished and going forward, without being surprised, and in a degree, at least, overwhelmed at its rugged vastness. Another tunnel of the same character could be constructed now at far less cost, much having been expended in experimenting, in the use of weak appliances, in the securing the necessary education respecting these vast labors, regarding which there was so little precedent.

Work was commenced in 1852 at the east end. When the formidable enterprise is finished, as many as eighteen years of solid, stern endeavor will have been expended upon it. An immense boring machine had been built at South Boston, and was, in parts, got to the mountain. It was "designed to cut a groove around the circumference of the tunnel thirteen inches wide." The center was to be split off by wedges or blasted away by powder. When it had gone ten feet it was wrenched to entire demoralization. Afterward, another and smaller borer was tried, with no success at all.

For a while work was done by hand-drills and gunpowder. But it was found that with

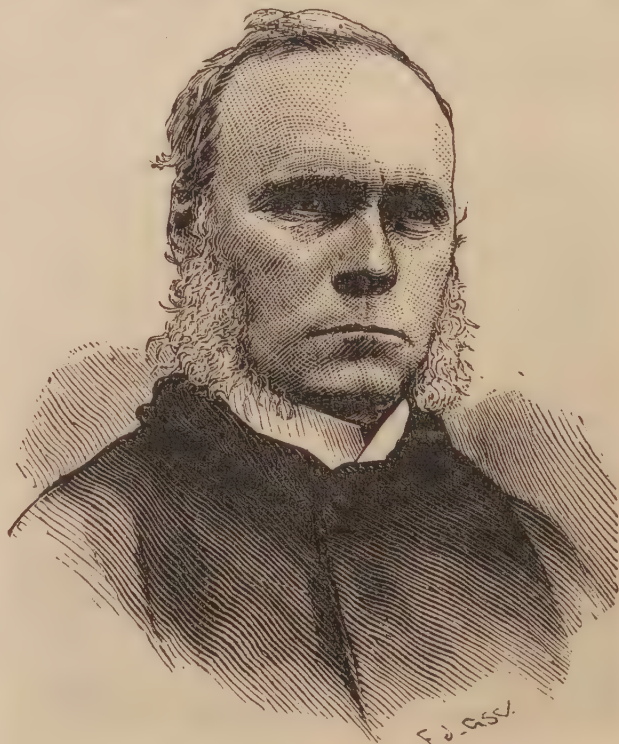


Fig. 7—WALTER SHANLEY.

the utmost application only sixty feet a month could be made at either heading, at which rate another generation would inherit an unfinished struggle with the mountain barrier.

Fortunately, the excavations have been hastened by the introduction of powder-drills, and of an explosive much more terrific than gunpowder.

The primary formation of the mountain is mica-slate, of great hardness usually. "Parts of this mountain have been found so hard and tough, and so difficult to drill, that 34

At first the workmen found a secondary limestone formation, and the progress was delightful. By-and-by this welcome strata dipped down below the grade of the tunnel, and they came upon demoralized mica-slate, upon slush. They had to build about them a very strong frame-work of timber and plank, to be supplanted by brick arching. This

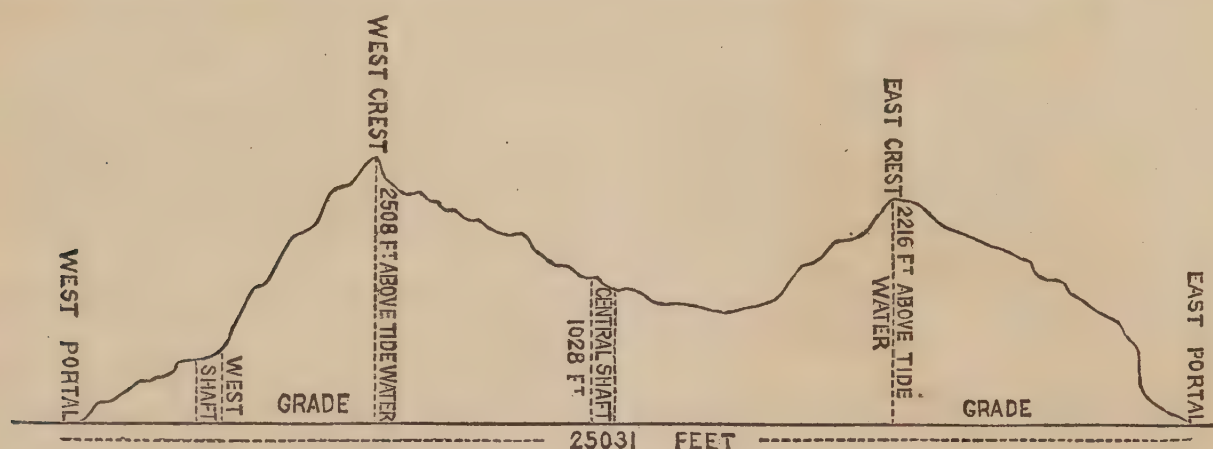


Fig. 8—PROFILE OF MOUNTAIN AND COURSE OF TUNNEL.

drills have been worn in drilling a blast hole 36 inches deep." Yet softness—"slump porridge"—has been a greater impediment than hardness; and at the central shaft the great conflict was with water itself.

The west portal is about two miles south of the village of North Adams. At the west end work has been slower than at the east.

had to be continued 2,100 feet, and for 700 the engineers found it necessary to render the masonry a complete tube. While this contest was going on, another gang sank the west shaft, and still another commenced the great central shaft, which is twenty-six feet in its longest, and fifteen in its shortest diameter.

MONEY—ITS FUNCTIONS AND REQUIREMENTS.—No. 3.

THE CURRENCY OF THE FUTURE.

IN the first article of this series (to which, in this connection, we refer our readers) we quoted largely from the able speech of Mr. Buckingham, in the United States Senate, January 7th, 1873, and from Mr. Boutwell's, Secretary of the Treasury, report of December, 1872, arraiguing the currency for its lack of elasticity.

The extract from Mr. Boutwell's report closed thus: "The problem is to find a way of increasing the currency for moving the crops and diminishing it at once when that work is done."

Our response is: Let Congress pass a very simple, and, therefore, easily-understood law, providing for the issue of treasury notes (greenbacks) as legal tender for all purposes whatever, to the extent which the requirements of the country indicate, and make such legal tender reconvertible, at the option of the holders,

into Treasury bonds bearing a rate of interest not much in excess of the average annual national increase of property—say 3.65 per cent. per year.

"In the interchangeability (at the option of the holder) of national paper money with Government bonds bearing a *fixed* rate of interest, there is a subtile principle that will regulate the movements of finance and commerce as accurately as the motion of the steam-engine is regulated by *its* 'governor.' Such paper money tokens would be much nearer perfect measures of value than gold and silver ever have been or ever can be."

Our readers should impress the above firmly in their minds, as there is more financial science contained therein in its adaptability to our present national need, than in all the volumes of political economy ever before written.

Horace Greeley, in a characteristic editorial of the *Tribune*, Nov. 9, 1871, said:

“The benefits of this system would be these: Our greenbacks, which are now virtual falsehoods, would be truths. The Government *would* pay them on demand in bonds, as aforesaid, which is in substantial accordance with the plan on which the greenbacks were first authorized.

“Our greenbacks, no longer false, but convertible at pleasure into bonds bearing a moderate gold interest and exchangeable as aforesaid, could not fail to appreciate steadily until they nearly reached the level of gold. Indeed, they would, unless issued too profusely, be really better than gold. Drawing a higher rate of interest than British consols, and convertible at pleasure, as these are not, they would in time obtain currency even in the Old World.

“The trouble so inveterately borrowed by thousands with respect to ‘over-issues,’ ‘redundant currency,’ etc., would (or at least *should*) be hereby dispelled. If there were at any time an excess of currency, it would tend to precipitate itself into the bonds aforesaid. If there should ever be a scarcity of currency, bonds would be exchanged at the Treasury for greenbacks till the want was fully supplied. Black Fridays and the locking up of greenbacks would soon be numbered with lost arts and hobgoblin terrors.

“Though the demand for these bonds might for months be moderate, their convenience and manifest utility would soon diffuse their popularity and stimulate an ever-widening demand for them. They would be a favorite investment with guardians and trustees, who should expect to be required to pay over the funds held by them at an early day, whether fixed or uncertain. They would say, ‘Though I might invest or deposit these funds where they would command a higher interest, I choose to place them where I *know* they will be safe and at hand when called for.’

“Ultimately, we believe they would become so popular that hundreds of millions of them would be absorbed at or very near the par of specie, and that with the proceeds an equal amount of our outstanding sixes might be redeemed and canceled, without advertising for loans or paying bankers to ‘shin’ for us throughout Europe. The interest thus saved to our country would be an important item.

“Such are the rude outlines of a plan which we did not originate, but which we heartily indorse. Why not give it a trial? We should

dearly like to inform Europe that, since she seems not to want any more of our bonds at five per cent., we have concluded to take the balance ourselves at $3\frac{3}{4}$.”

Some one has well remarked that the truest test of a scientific theory is in its *power of prediction*. Measured by that severe criterion, the verdict must be in our favor, for, while our opponents have been entirely bewildered by the phenomena of last fall, political economists of our school predicted them, and placed the predictions on record.

An analysis of the foregoing programme shows a logical division into four parts, thus:

1st. Issue of Treasury notes (greenbacks) to the extent which the needs of the country indicate.

2d. Such notes to be legal tenders for all purposes.

3d. Such notes to be convertible, at the option of the holder, into Government bonds bearing a low rate of interest.

4th. Such bonds payable, principal and interest, in said currency notes on demand.

The first three have been spasmodically accepted at different times in part; sometimes under pressure of necessity; sometimes from vague aspirations for response to our need—but never in combination.

The result has been like that of a four-horse balky team—not only not pulling together, but a part lying on the breaching, while the rest pulled on the traces.

For instance, as to first requirement of ample currency, an eminent antagonist in the columns of the *N. Y. Times*, over the signature of “Knickerbocker,” says:

“By reference to the report (Secretary of the Treasury) of August 31, 1865, it will be found that the circulating medium consisted of

United States Notes, Greenbacks, and Fractional Currency.....	\$459,505,311.51
National Bank Notes and State Bank issues, (Report 1865.) by Controller's Report, Oct. 1, 1865.....	250,189,478.00
Total.....	\$709,694,789.51

“To this amount must be added the sum of five per cent. legal tender notes, and of certificates of indebtedness, etc., shown to have amounted to \$443,220,103.16; in all, a sum of \$1,152,914,892.67. This, then, was the circulating medium of the country at the time of its greatest expansion. * * *

“The Treasury statement of July, 1868, shows to what extent the circulating medium had been then contracted. It then consisted of

United States Notes, Greenbacks, and Fractional Currency.....	\$388,768,674.75
National Bank Notes outstanding 1st November, 1867.....	299,103,996.00
Total.....	\$687,872,670.75

To which we add the sum of temporary loan certificates and other notes serving the purposes of currency, amounting to \$92,687,442.64, and the sum of circulating medium will be found to have then reached \$780,560,113.39, and shows a contraction by the Secretary of \$372,354,779.28 in its total amount. * * *

"The country at large had felt the pressure of the screw, but had not been able to discern precisely from what quarter the pinch came, the contraction being confined to those outside forms of Treasury obligations which, though not currency in the strict acceptation of the word, were still used as such in the larger transactions of trade and financial exchange. When, in a time of general pressure, the currency itself became the subject of the pruning knife, the country not only felt the knife, *but saw how it was handled*—[these italics are ours]—and refused to submit longer to the 'heroic treatment.'"

"Knickerbocker's" figures, quoted above, take us to July, 1868, when, as the "people felt the knife, saw how it was handled, and refused to submit longer to the heroic treatment," the contraction of the cast-iron currency was stopped, and the people allowed to "grow up to it."

Five years have passed, and as we double in population in thirty years, it follows that we are one-sixth larger in 1873 than when we groaned so awfully in 1868. This one-sixth growth, with the same volume of currency, amounts practically to a contraction of one-sixth of the aggregate of 1868, and now we have but \$13.68 currency per head (including \$40,000,000 in gold quoted by the Controller of the Currency as "in circulation"), which is about one-half the average of France, one-third of England, and 29½ per cent. of that quoted by "Knickerbocker" as existing at the close of the war.

No wonder that our industries are paralyzed, and our crops stuck in transit for lack of currency to move them.

With the foregoing figures—taken, mind you, from the compilation of our antagonists—before us on one hand, and *Hunt's Year-Book*, and other statistical authorities, on the other, let us see how this resulted.

The mercantile failures in the Northern States, from 1862 to 1870, inclusive, which we

copy from *Hunt's Magazine and Year-Book* for 1870, were:

Year.	Number of failures.	Aggregate liabilities.
1862	1,652	\$23,049,000
1863	495	7,899,000
1864	520	8,579,000
1865	530	17,625,000
1866	632	47,333,000
1867	2,386	86,218,000
1868	2,197	57,275,000
1869	2,411	65,246,000
1870	3,160	79,697,000

We supplement the foregoing table with the following (for the whole nation), of commercial failures for 1870, '71, and '72:

Year.	Number of failures.	Aggregate liabilities.
1870	3,551	\$88,242,000
1871	2,915	85,252,000
1872	5,069	121,056,000

From the indication of the last few weeks, we must certainly be convinced that the record of the dead of '73 will be overwhelmingly in excess of its predecessor.

This computation does not include any losses not resulting in absolute failures, but it indicates beyond cavil that there were six-fold more of losses and disasters during each year of currency contraction than during each year of full currency.

It will be observed by comparison of dates of contraction with dates of failures that they kept pace in equal step. To effect these results—as orderly and economical as the career of a mad bull in a crockery store—the Government—

1st. Retired its certificates of indebtedness by borrowing gold from Europe at a high rate of interest and giving bonds, which, with exemption from taxation, cost the people at least 10 per cent. currency interest, when the people themselves would gladly have taken currency, saving all gold premium and interest.

2d. It created and continued the existence of about \$400,000,000, bonds costing 10 per cent. interest as above, to enable it to withdraw and withhold \$354,000,000 currency from the people for no other purpose than to retain said bonds as security for its indorsing the paper of holders of said bonds, for which indorsement said Government gets 1 per cent. per year interest, and calls it tax, while the people would have been much better pleased to have retained their own paper and saved the bond interest. In short, in this transaction the people, collectively, through their agents, borrow money at 10 per cent., and loan it again at 1 per cent. to

the bond-holders, who re-loan it to the individual people at 7 per cent. to 50 per cent. per year.

3d. With plenty of bonds outstanding costing, as above, 10 per cent. interest, it called in and paid off all its 3 per cent. indebtedness.

4th. It then attempted to absorb the remainder of the life-blood currency of the people at the rate of \$4,000,000 per month, and actually progressed eleven months in the nefarious work when (to quote our antagonist again) "the people not only felt the knife, but *saw how it was handled*, and refused to submit longer to the heroic treatment."

Like John Le Pean, they "could eat caterpillars, but squash bugs were a little too fat."

[TO BE CONTINUED.]

LIFE IN NORTHERN TEXAS.

THE climate of Northern Texas, during nine months out of the twelve, is absolutely and perfectly delightful. There is no such thing as intense sultriness, for a refreshing breeze is always blowing. Spring comes in April, and enamels the prairies with a wealth of blossoms, among which none are more splendidly beautiful than the prairie plume, a plant which sends up a lofty flower-stalk, crowning it with a plume-like head of closely clustered crimson flowers. These prairie plains are destined, some time in the not far-distant future, to supersede Florida and Minnesota as a resort for consumptives. The dryness and equability of the atmosphere strengthens, vitalizes, and heals the lungs that have become diseased in a wet or freezing climate. It is said that a case of consumption never originates there; while many who have gone there in the last stages of it have taken a new lease of life and lived comfortably for fifteen or twenty years. In such cases, however, they got the full benefit of the healing air by breathing it in an undefiled state, sleeping under a tent, or in an open log cabin.

As a farming country, Northern Texas possesses great attractions. Its broad, rolling prairies are easily convertible into fields of cotton—there is no clearing to be done, only the tall grass to be burned off in the spring, or turned under with a plow. And cotton grows there beautifully. Since railroad facilities have been introduced its culture pays

When Jim Fisk and other geniuses stole the Erie Railroad, the splendor of the villainy so dazzled the world that for the moment men forgot to call it stealing.

A deep conviction is fast gaining ground that, emboldened by that operation, his old fellow-workers, with other conspirators on both sides of the Atlantic—some Jews, others bad Christians—have a deep-laid plot to so reduce the values of the nation that a ring of a thousand men can gobble them all up.

Most certainly, if such is their plan, the past action and present lethargy of our legislative and executive departments play well into their hands.

handsomely. If a farmer wants to raise corn, oats, barley, and wheat, as well as cotton, he can just fence in a big prairie field, fifty, a hundred, or three hundred acres, as he chooses, and not go to the trouble of "taking in" all the land he owns. Two plowings, one with a turn-plow, the other with a sweep, will make a crop of cotton, though, as in the "Old States," it does better with more careful culture. The quick growth of cockle-burrs and sun-flowers necessitates the use of the hoe more than grass or any other kind of weeds. Corn yields splendidly. From one quart of corn, planted in May, three bushels were gathered. Stock-raising is a specialty of Texan farmers. A herd of forty cows will, in twenty years, produce a drove of eight hundred; horses increase in the same ratio, and both get their living off the prairies, the owner taking no trouble further than branding them; the mark generally being his own initials. Colts are broken, a few at a time, from a drove, caught with a lasso and thrown down. An unbroken horse will bring fifty dollars; a broken one, seventy-five.

In the spring of the year cattle speculators pass through the country buying up cattle for beef, giving, where they buy a large drove, not more than six dollars per head. A cruel custom prevails among these cattle drovers, which they excuse on the ground of expediency. As large numbers of cows with calves are included in the droves, they drive them all together for a few days, till they

come to some well-watered timber, where, having camped, they shoot all the young calves, saving their skins, which will bring them as much money as the calves' flesh would. They remain at these camps several days, so that the cows may see and be convinced that their calves are dead, as otherwise they would not submit to be driven. The drovers contend that it is more merciful to kill the little calves in this way than to wear them out by a march of several hundred miles, as their usual course lies northward to the track of the Missouri, Kansas, and Nebraska Railways, where the cattle are shipped for beef to Eastern markets. The settled population of Northern Texas accumulate property rapidly, raise their herds of cows and horses, and the finest of wheat, but there is a large floating population, constantly on the move, who hardly pay expenses.

There are a good many Indians still in the country. It is said that in the part of country inhabited by the Comanches a silver and copper mine has been discovered, which will doubtless be opened and worked by capitalists in a few years. The friendly Indians who come into the country keep up the old system of barter, bringing venison, hams, deer-skins, moccasins, and baskets to exchange for blan-

kets, whisky, powder, shot, corn, and flour. Their baskets are beautiful specimens of deft handiwork, made of *split* cane, brilliantly colored, red, green, blue, and yellow, with vegetable dyes. They are made by the squaws, who, as from time immemorial, do all the work while the warriors hunt and ride. The price of a basket is what it will hold of corn, wheat, or flour. They use no salt with bread or meat, stripping the flesh entirely off the bones, and stretching it as thin as possible to dry it. Their method of killing a beef aptly illustrates their savage temper, and how they *educate* themselves to practice the torture. Several of them get round the animal to be killed, and shoot arrows at it in parts of the body where the points of the arrows sticking in will only produce a stinging, irritating sensation, and this they will continue, laughing, yelling, hooting, at the evident sufferings of the victim for hours, until, indeed, they see it droop as if about to die, then a well-aimed arrow through some vital part instantly dispatches it. To this day they occasionally steal white girl children and carry them off, in order to get a ransom for them, managing to get the reward, on the restoration of the child, without betraying the original thief. V. D. R. COVINGTON.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall !
Thou art the nurse of virtue.

"THROWING MONEY IN THE FIRE."

BY MRS. JULIA A. CARNEY.

"MINNIE C—— is very happy to-day," said my little boy, as he returned from the house of a neighbor. "She has a new china doll."

"Yes," echoed another child, "she was three years old yesterday, and her father bought the doll for a birthday present. She is delighted with it."

"She is as happy as she ever will be in this life, if it is her first real doll," was the reply.

For the girl's first doll, and the boy's first boots, are *to them* all that after years will bring of womanly love or manly ambition.

"Mrs. F—— thinks it is throwing money in the fire," said the little boy.

"I presume it would be 'throwing money in the fire' to buy a new doll for Mrs. F——," I replied, a little abruptly.

"There I beg leave to differ," said an older speaker. "Mrs. F—— appears to me to be very happy with *her* new doll. The only difference is that Mrs. F—— is a little more anxious, because her doll has the whooping-cough."

"Yes, dear; you are right. It is maternal love that sanctifies and ennobles Minnie's doll

in my estimation, as it almost glorifies it in that of the child. The same maternal love mingles with anxiety, yet happy even in its solicitude, bends over the sick babe. To the child it is a pure and simple gladness, to the mother it is that deep joy which comes only with the endurance of anxiety, as if it were the promised strength, which shall ever be equal to the day. The money which purchases the doll is no more wasted than that which feeds and clothes the child. The physical want may be the most clamorous, and in extreme poverty must, perhaps, be satisfied first; the recognition of spiritual needs is the boundary between man and the animal."

"Man is an animal. Professor S—— says so, and demonstrates it upon the black-board as a logical truth," says a student.

"The amendment is accepted. Man is an animal, and a voracious one, too, or weary housekeepers would not have much cooking to do. He is not one of the lower animals, however, or we should have no need of snowy table cloths, damask napkins, silver forks or butter knives. More conclusive still, he would not pause to discuss metaphysical questions during his dinner."

"To go back to first principles, however, says one, "we are doing Mrs. F—— injustice. Her objection is not to the expenditure of money to please the child, but she says Minnie is so young it will be destroyed immediately, and a rag doll, or handkerchief pinned into shape, has heretofore made her just as happy."

"A grave mistake in the premises, and utter ignoring of important parts in the conclusion! A child is sent into this world to grow mentally as well as bodily. At a very early age it will distinguish the prettier toy, if both are presented at the same time, and will prize and preserve it according to its little knowledge. If the prettiest is presented last, it will have acquired a higher estimate, and will never again be satisfied with the lower."

"We are getting very abstruse, considering the conversation commenced with a child's doll," exclaims one.

"Large oaks from little acorns grow," repeats another, with a tragical air.

"Pure lives from happy childhoods flow," I respond. "It was a trifling toy, and

a careless witticism, with which we began jestingly, but the toy has given no trifling amount of happiness to a little child, and the witticism involved a principle which underlies all our social relations. It can not be a waste of time or means to give innocent joy to another, even if we ourselves have outgrown that source of joy."

"The suit of clothing my little one has outgrown may still be of fitting size for a younger child; the dress I think past using is gladly received by my colored laundress."

"In like manner Minnie's father has outgrown the penny whistle and the noisy drum, which were to his boyhood what the doll is to her infancy. In their stead he enlivens that dreary engine-room with his violin, and rests from feeling and guiding that grim monster by making miniature models of his own embryo inventions. Some day those intervals of leisure may give the world a blessing equal to the one which now furnishes his hours of weary toil."

"Surely no other invention can be as useful as the steam-engine," said one, half doubtfully.

"So might our ancestors have thought the horse never to be rivaled as a means of locomotion. What think you of the telegraph? It carries our thoughts as the express train our bodies, only more swiftly and more safely. Is mind less useful than matter?"

"I expect we will have a 'brain-wave' telegraph some day, and dispense with the wires altogether."

"Stranger things than that have been, and yet may be. We grope blindly for many a key which the light of science shall yet reveal, and the 'gates' which are now but 'ajar' shall yet be thrown wide open."

Our dinner was over, and so was our discussion. We wended our separate ways to our varying duties. Perhaps, of all who had joined in the conversation, I alone retained it in memory, or gave it one further moment of thought.

To me it seems the greatest problem of our artificial life. Which are the real, and which the ideal needs? Which is wasted, the means which supply the body or those bestowed upon the soul? Which ministers to the real need most truly—the flower by the cottage door, the vine over its windows, the tree which shades its roof, or the wheat-field

which feeds its inmates? If they are truly healthful they have an appetite for each.

There are fires for which it is well to expend our means. They are those which light a happy home, which give warmth to ourselves, and cheer the passer-by, or "the stranger that is within our gates"—love, happiness, social friendliness, and neighborly kindness. Hesitate not to expend time, talent, worldly means to light and maintain these fires. Pleasant memories

will be left when the toy is broken, the game outgrown, the kind word forgotten, the pleasant smile vanished, and the friendly hands folded in the grave.

Beware of expending means to feed the fires of worldliness, of gluttony, of sin. Once enkindled in your being they shall burn with a flame before which those of an old theology shall pale, and your social relations, your better nature, your good resolutions, may all be consumed as a scroll.

IT NEVER PAYS.

It never pays to fret and growl
When fortune seems our foe;
The better bred will push ahead
And strike the braver blow.

For luck is work,
And those who shirk
Should not lament their doom,
But yield the pay
And clear the way,
That better men have room.

It never pays to foster pride
And squander pride in show;
For friends thus won are sure to run
In times of want or woe.
The noblest worth
Of all the earth
Are gems of heart and brain,
A conscience clear,
A household dear,
And hands without a stain.

It never pays to hate a foe,
Or cater to a friend;
To fawn and whine, much less repine,
To borrow or to lend.
The faults of men
Are fewer when
Each rows his own canoe;
For feuds and debts
And pampered pets.
Unbounded mischief brew.

It never pays to wreck the health
In drudging after gain,
And he is sold who thinks that gold
Is cheaply bought with pain.
A humble lot,
A cozy cot,
Have tempted even kings,
For stations high
That wealth will buy
Not oft contentment brings.

CLEAN OR UNCLEAN LITERATURE.

"Fee—fi—foh—fum!
Blood—blood—I will have some."

WE have laughed at Englishmen for the animal nature which delights in "roast beef—rare!" and which, not infrequently, has been called upon to digest a genuine blood-pudding; but it is time we stopped to pity ourselves for that grosser taste of the mental appetite—that incessant, morbid craving which demands a daily repast of crime and horror.

It is time we began to arouse from our lethargic indifference, and to understand that there are other passions than love which "grow by what they feed upon."

We have so long followed the bait which ministers to an unnatural and sickly appetite

that we refuse to be satisfied with anything less than the strongest stimulants, and cry out, in our feverish thirst, "Blood—blood—I will have some!" The public is wild with delight when furnished with a genuine Stokes or Kate Stoddard case; there is something perfectly satisfactory in the mixture of romance and horror contained in each; but the public is getting tired of these, and begins to ask for some fresh tragedy "a little more startling, if you please, than either." This unnatural appetite, which has been created by unwholesome mental food, the journals of to-day find it difficult to satisfy; and some of the best and bravest not

only stand aghast at results which are their own offspring, but have with resolution and principle already begun to spread the board with more healthful and digestible articles. Is there, indeed, nothing good in poor human nature that we should wring from it the last drop of evil wherewith to quench our feverish thirst?

It matters little or nothing that we are entirely ignorant of the parties concerned; whatever they were before, their crime has rendered them famous now. It may be that they possess "just humanity enough to keep them from walking on all fours," still the one act of horror is sufficient to bring them into distinction. The dark deed, fit only to be spoken of in whispers, becomes the subject of household conversation, and is served up hot, cold, hashed and re-hashed in a manner that shows the sympathy of the community; while it appears to be regarded as too delicious a morsel to permit the slightest crumb to be swept away unnoticed. Were the matter here thrown before us given in book form, every judicious parent would secure the volume under lock and key; but so far from this being the case now, even little children are left to puzzle out the pernicious phraseology and to ask the meaning of words which should only be spoken in police stations or mentioned in medical treatises. The mind grown familiar with acts of crime and horror soon ceases to experience any sensation of shrinking or disgust, and begins to consider the journal as having "nothing in it" unless it can furnish each day some fresh repast of atrocity. It is not long before the tendency toward imitation becomes manifest, and the boyish fancy marks out for itself a career of crime whose warp may be self-furnished, but whose bright coloring, pictures of heroic guilt, and glittering eminence have been painted by the press. Indeed, there seems to be pointed out no field for the display of courage, none for youthful heroism, none for the ardor of manly daring, except as shown in the illustrations of police journals, or in haunts where crime runs riot. Journals are too often but inflammable machines, fanning the flame of which they have already been incendiaries, and goading on weak and tempted humanity to the point of crime.

It may be that while we have frequent individual cases of those who are injured by this daily contact with evil, no great public calamity will result from it, but the experiment is a dangerous game to play at. A pot may boil over many times before the stove is broken, but there comes a day when it is either ruinously warped or gives way utterly under the constant ebullition. That matters of state interest, subjects which concern the general good, that a calamity, whether private or public, that demands for aid and charity should receive conspicuous notice, seems right and proper; but why deeds that are vile and loathsome, the recital of which can not affect the public mind except to injure it, should be brought out with such fondness of display, such minuteness of detail, we fail to comprehend, except it be for motives impure as the act which it narrates.

Of late one or two journals have arisen entirely disclaiming any political or religious preferences, throwing themselves open for the discussion of all topics, and refusing to be considered as assuming partisanship upon any theme. We do not hesitate to say that the position is more disastrous for the public morals than a radical one. We are so constituted as to be almost incapable of reading both sides of any topic with equal interest; we either approach it with opinions and prejudices already formed, or we are very soon swayed by an author in his manner of presentation. A sort of dash and brilliancy will, especially, lead the young to certain articles simply for their style; very soon the judgment becomes affected, and the veracity of the argument is not questioned. It is well-nigh impossible to mix two liquors so that one or the other shall not seem to preponderate; the actual quantity may be the same by carefulest measurement, but the flavor of the one more pungent or more delicate will pervade the whole.

We are told that the press only print what the public demand; that if tales of horror and crime make up the substance of a daily paper, it is because the public exact this sort of stimulus. Even to those who desire a purer journalism, the recital of deeds of guilt has come to be looked upon as so inevitable an evil, that it can only be done away with by dispensing with the journal alto-

gether. Few are prepared to make such sacrifice of their news, and therefore the subscription list is held firmly.

Fathers ask for a paper which may be placed unblushingly before wife and children, and which, since it must needs speak of crime, shall refrain from entering into its hideous details. There is enough to be gleaned each day from a world thrown open to telegraphic communication to constitute a

journal at once interesting and enlightening. We need journals constructed of unquestioned and legitimate material; not flinging out observations and prophecies to-day, in blind haste to please the public, which must needs be recalled to-morrow; above all, pure in sentiment, making the evil and crime and ever downward tendency of tempted humanity a theme rather to be mourned than gloated over.

J. A. WILLIS.

PERVERTED SELF-SACRIFICE.

A LADY correspondent of the Philadelphia *Saturday Evening Post* puts an end to a good deal of cant in the following sensible letter:

"Don't call me a hard-hearted heathen now, I beg you. Call me pet names, but don't call me that; because I am sensitive, and it will hurt my feelings.

"But the fact is, I don't believe in self-denial to an unlimited extent. I don't believe it's Christian doctrine, in the first place; and in the next place, it is the ruination of people to be sacrificed to, like an old heathen deity. As a general rule, things which sound well in poetry work most abominably in real life. I've noticed that. Wherever you observe that anything sounds particularly beautiful in poetry, you may set a peg down that it's something which won't work in practical life. For instance, From time immemorial, it has been a favorite amusement of poets and writers to harp upon the moldering string of the loveliness of a mother's devotion to her children, giving her life up to them, letting her whole existence be swallowed up in theirs, like the whale swallowing Jonah, as it were. It's a most pernicious and dangerous doctrine, worse than Darwinism; yes, worse than women's rights and cold water put together. Wherever a woman lets a gang of children swallow her up, like a very big whale swallowing a very little Jonah, just there she fails most miserably in her duty to herself and her children. I know it's a very fine thing to talk about how lovely it is for a mother to deny herself evening parties, good clothes, intellectual pursuits, and all that, to devote herself to her children—how altogether admirable it is for her to spend the energies on them, washing, dressing, decking them out in the most elaborate clothing her purse and fancy are equal to, and sending them off to Sunday-school, or a party, or somewhere, while

she herself stays at home stitching or cooking for them, in a dingy old calico wrapper, with her hair in that horrid knot, like a baker's twist. Very beautiful, isn't it?

"Yes, oh, yes!"

"I tell you it is not beautiful at all. On the contrary, it is exceedingly silly. There is a well-known principle in mechanics that no labor is ever lost; but it appears to me that this sort of overdone devotion of mothers to their children comes about as near being labor lost as anything well can be, not to violate a principle of physics. It is an injury both to mother and children, and an injury to other people, let me tell you. I knew one of these excessively devoted mothers. I have known several in my time; and I think I never saw one yet whose children did not look down on her as a drudge, and nothing else. I never saw one whose children did not become selfish men and women, utterly regardless of the comfort and rights of other people, especially of their own families. But this mother was so devoted to her children that she arose in the morning and made the fires all over the house, and let her grown sons lie in bed till breakfast was ready, when she called them very tenderly, and when they came down stairs, she did not exactly wash their faces for them, but she had soap, water, and towels, all waiting for them, as though they had all been princes of the blood, and she a kitchen scullion. And she made herself a slave to them in everything else, just the same. They regarded their mother as a drudge born to wait upon them; and by-and-by, when they had families, they regarded their wives and children in exactly the same light. They expect their wives to creep meekly about and drudge for them, just as their mother used to do. If the household of one of them happens to be temporarily without a servant, his wife must arise first, make the fires, prepare the

breakfast, and then gently awaken the lord and master of the premises.

"There is a golden mean to be observed in all things. Children ought to be brought up to wait upon themselves and other people, to have regard for the rights and the comfort of others. A stupid, affectionate drudge of a mother is about the last person on earth to train model republican citizens.

"There is nothing in this life more grand or heroic than to lose one's life in trying to save that of another. Moral grandeur can reach no sublimer height than to give one's life to save another life. When it comes to be one's duty to die for others, one ought not to hesitate a moment. But that is something very different from one individual's being a slave to another while both are living. Such self-sacrifice amounts simply to committing suicide by inches without doing the other person any good. The longer I live, the more apparent it becomes to

my mind that the Creator never intended one person to be born for a drudge to another. Self-sacrifice is a good thing till it reaches the point of engendering selfishness in the person sacrificed to, then it ought to stop."

[This deserves a careful reading; there is so much truth in it. A safe rule is given us in these words, "As ye would that men should do unto you, do ye also unto them." In short, do as you would be done by—not more, not less. Draw the line as nearly as possible, and act accordingly. The divine injunction is right in every point of view. Parents should not become drudges or slaves to children, nor should children become drudges or slaves to anybody. What is right, in the sight of heaven, must be done by each and all. Parents "provoke not your children"—"children, obey your parents"—and (if respectable) respect them. Some parents are such miserable drunkards that they forfeit all respect and affection. Such can not—should not—be obeyed.

TWO SIDES OF LIFE.

There is a shady side of life,
And a sunny side as well,
And 'tis for any one to say
On which he'd choose to dwell;
For every one unto himself
Commits a grievous sin
Who bars the blessed sunshine out
And shuts the shadows in.

The clouds may wear their saddest robes,
The sun refuse to smile,
And sorrow, with her troop of ills,
May threaten us the while;
But still the cheerful heart has power,
A sunbeam to provide;
And only those whose souls are dark
Dwell on life's shady side.

ONLY ONCE.

AM I dreaming? What sudden hallucination is this? Or can it, indeed, be possible? Frank Lester, my college chum, in prison for murder! And I took up the paper, which had fallen from my nerveless hands, and read the fatal item again and again, to assure myself of its reality.

Yes, it was but too true; he had committed the greatest of all crimes while under the influence of liquor; and I, who had known him intimately for years, had never known him to taste of the intoxicating cup. What sudden temptation, what terrible blow was this! But a few weeks before we had spent a happy evening together at his pleasant home, relating our mutual hopes and plans—we had pictured an ideal, noble life, and had resolved that we would strive to attain to a high standard; and now his life-hopes were

forever crushed; his prospects destroyed; he was the companion of the vilest criminals, with the brand of murderer upon his brow. A thousand thoughts seemed to flash through my brain, but clear above all was the impression that I must go to him at once. And in a comparatively short time I was treading the gloomy corridors of the prison. The warden opened the door of the cell where sat my unhappy friend. He looked up as we entered—but oh, how changed! how wan and haggard was his face! upon which a lifetime of suffering seemed already stamped. No words of noisy greeting, as ever aforetime, passed between us. I sat down beside him, and silently placed my hands in his.

"Edwards," he exclaimed, when we were left alone, "do you not shrink from and abhor a murderer?" and in the tone of his voice

there was a whole world of agony, of remorse, and hopelessness. "Is there not contamination in my very touch?" and he arose and paced the narrow room with wild impatience.

"No, my poor friend," I replied, "I do not, for I well know that you could never be a deliberate one. Can you bear to tell me your story to-day?"

"Oh, no! not to-day—I can not speak of it to-day; come to me again to-morrow, and I will tell you all. Ah, my friend," he continued, mournfully, "but a short time ago I was looking forward hopefully to the future, wishing to live worthily and nobly, and now I am in a felon's cell, with a felon's ignominious death or a dreary prison life before me. And my mother, oh, God, comfort my mother! Will you not go to see her now? Tell her"—but here the voice of the strong man was drowned in sobs; and I, what could I say—what can we say, when a terrible and irremediable sorrow is before us—but breathe that prayer for help and mercy so often heard in times of trouble, and tearfully commit him to the Judge, who is also the Father, to the kind Saviour who "hath borne our griefs and carried our sorrows!" Promising to be with him on the morrow, I left him, to visit his widowed mother. I almost dreaded to enter that once happy home, and shrank from meeting her whose dearest earthly hopes had been centered in her only son. There were traces of tears visible on the pale cheeks of the widowed lady as she greeted me, and her voice trembled as she spoke of her son; but no impatient murmur arose to her lips, no wild complaints were heard. In this, the saddest of all earthly calamities, when separation and disgrace, sin and shame were all commingled, she still bowed in meek submission to the will of the God whom she adored—the Father whom she loved, and who was indeed her "refuge and her strength." In this bitter hour, when a trial which would be a lasting stigma—a sorrow far worse than death—had fallen upon her, and she might well have exclaimed, "All thy waves and thy billows have gone over me, oh, God!" she still rose above the shock, and fully demonstrated by her conduct the power of the Gospel of Christ to sustain and soothe the afflicted.

Never shall I forget her parting message

for her boy! Her look and manner, with their import, have engraven them upon my heart. Would that hundreds of the young, the tempted, might with me have listened to them!

The next day, according to appointment, I again visited my unfortunate friend, whom I found calmer.

"Well, Edwards," he exclaimed, with a feeble attempt to smile, "true to your promise—but what of my mother?"

I told him all, and tried to lead him to the Saviour, on whom she leaned.

"If the past week could be but blotted out!" he said; "an eternity seems to have passed since then. Oh, Edwards, had I but died before this! A week ago I went with Lewis and T—— on a pleasure trip to S——. We had a delightful sail, were cordially welcomed by their friends. For a time all was enjoyment. It being the great gala day was, however, the pretext for liquor being freely indulged in. Knowing that I was strictly temperate, they seemed determined to enjoy the petty triumph of seeing me also partake of it, and again and again I was urged to join them. For a time I resisted all their importunities, and proffered every possible apology for declining. But at length, weary of ridicule, stung by contemptuous sneers and sarcastic remarks about cold-water fanatics, I weakly resolved to gratify them, with the mental reservation that it should be only once, and that never again would I frequent their company. How I despise myself for that cowardly yielding, God alone may know. I drank not one glass only, but many, for the first seemed to awaken an insatiable appetite, of which I had before never dreamt. I remember that I wondered how I could so long have abstained from it. Poor Lewis was also somewhat intoxicated, and soon, maddened by stimulants, high words passed between us, then followed fiery reproaches, threats of violence were used, I am told, till finally we came to blows, and in the affray I stabbed him fatally. Need I relate what followed?"

I found him fully resolved to declare his guilt, and urge no extenuating plea, a resolution which I did not seek to alter.

At length the trial came, into the details of which I will not enter. Suffice to say, that in consideration of attendant circum-

stances, the sentence by the court was imprisonment for life.

In our last interview he said to me at parting, with an expression and earnestness which words may not portray :

"Life, with all its magnificent possibilities, is before you ; I need not say, do not let one false step lure you into an abyss of misery, for I know that you will not ; but I entreat of you that you will urge all those whom you can influence in your daily life, particularly your young acquaintances and friends, that they beware of that most fatal of all sentences—most pernicious of all pleas, 'Only Once.' Relate to them the story of my bright and

happy prospects ; tell them of the fearful results of a moment's weakness ; of my poor companion, hurled unprepared and unrepentant into the presence of his Judge ; of the sufferings of his friends, the agony and shame of mine. Describe the mental tortures, the blighted life, the living death before me, and beg of them that they allow no shrinking from taunts or censure to swerve them one iota from the path of conscious right or duty. Although indulging in the intoxicating cup but once may but seldom lead to such swift and sudden ruin as mine, yet it almost invariably opens the flood-gates through which seas of sin and misery roll." C. I. ANDERSON.

MY MOTHER.

BY H. W. HOLLEY.

ALL, all of my life underlying,
There is a sweet memory of thee ;
More hallowed by time, never dying,
Growing hourly more sacred to me—
A memory unsullied, untainted,
A remembrance devoid of regret ;
A picture of one truly sainted
In my heart's secret recesses set.

Not the grief that succumbs to time's healing,
Nor the memory its change can destroy ;
Not an old man's exhaustion of feeling,
Nor the fickle heart-sobs of a boy

Are mine ; but like zealot untiring,
Whose altars are ever aflame,
Each act, thought, word, deed, or desiring
Is blended in part with thy name.

What thou *hoped* I might be, I endeavor
With all my best efforts to be ;
Though closed are thy dear eyes forever,
I must feel they are still watching me.
And for what little fame I am winning
When applause greets my listening ear
In the noise that around me is dinning
'Tis what *thou* might'st have said that I hear.

TELEGRAPHIC COURTSHIP.

THE report of Mr. Scudamore, the Director of Postal Telegraphs in Great Britain, is not exactly a novel, and yet it contains certain statements which make up a romance of the newest and most original description. After saying how successful he has found the system of employing male and female clerks together, and how much the tone of the men has been raised by the association, and how well the women perform the checking or fault-finding branches of the work, he goes on to speak of friendships formed between clerks at either end of a telegraph wire. They begin by chatting in the intervals of their work, and very soon become fast friends. "It is a fact," continues Mr. Scudamore, "that a telegraph clerk in London, who was engaged on a wire to Berlin, formed an acquaintance with, and an attach-

ment for"—mark the official style of the language—"a female clerk who worked on the same wire in Berlin, that he made a proposal of marriage to her, and that she accepted him without having seen him. They were married, and the marriage resulting from the electric affinities is supposed to have turned out as well as those in which the senses are more apparently concerned." Nor must the prudent reader run away with the idea that these young persons were very rash, or that they married without due acquaintance ; for it is a fact that the telegraphic instrument is a sort of phrenological machine, and a clerk at one end of a wire can readily tell, by the way in which the clerk at the other end does his work, "whether he is passionate or sulky, cheerful or dull, sanguine or phlegmatic, ill-natured or good-natured."

THE NEEDS OF THE BODY THE BASIS OF EDUCATION.

HERBERT SPENCER makes the knowledge of the preservation of life the basis of all education, since life is before action. It might seem that this great truth is easy of application; but, on the contrary, it is exceedingly difficult. The whole system of education is very much like the stuffing of the goose whose liver is destined for *pâté de foie gras*, good neither for the preservation of life, and exceedingly detrimental to action.

Why should any one be compelled to argue that when a child possesses a knowledge of the needs of his own body, it is worth more than all other branches of study put together, because he can not live, though he may exist, without such knowledge, and can not act suitably unless he live?

Such knowledge is not taught early in life; indeed, it is but a short time ago that it was taught at all; consequently, we have graduates of colleges who know a little of everything except this most important branch; men and women who are the dupes of doctors all their lives, who swallow patent medicines with all the credulity of the ignorant.

There is no reason why, before a child is taught to read, he should not be familiar with the common facts of anatomy, physiology, and hygiene. There is no study that has a greater fascination for the mind of a child than the needs of his own body. Let the teacher go very deeply into the subject, until the young are taught to refrain from vicious practices, not merely because they are morally wrong, but also because such habits produce feeble men and women, unfitted to perform the functions of life.

But it is also important that a child should be taught in school how to act in emergencies. Every child in a primary school should be shown (and made to practice until he is familiar with the process) how to improvise a tourniquet, by which, with a handkerchief and a piece of stick, the blood from a severed artery can be checked until the arrival of the surgeon. In the war of the Crimea, after a terrible battle, an officer was found just breathing his last, his life ebbing away in the flowing blood of a severed artery. By his side sat a young man, an army surgeon, the picture of despair. That night the army

surgeon committed suicide, simply because the death of the officer was caused by the fact that he did not know how to improvise a tourniquet, a simple thing he should have learned in his infancy.

It would be well for children to be taught how to afford relief in cases of sunstroke, suspended animation from immersion in the water, and simple antidotes to poison.

It is generally said when people do not know what to do in such cases, that they've no presence of mind, when the truth is, they never had any mind on the subject to be absent.

It would be well, also, for children to be trained in the knowledge of these things, that they may not be at the mercy of every doctor who may happen to be nearest in case of sickness. It is said that the excessive use of calomel is out of fashion, and yet about a year ago a lady in the country called in a doctor, simply because he was the nearest one, and the case demanded prompt attention; she besought the doctor to give her no calomel, as her system would not bear it. He promised he would not do so, and administered powders under some innocent name; but they happened to be calomel; yet even after salivation had attested the truth of this, the doctor declared he had given no calomel. There should be instruction given to every child sufficient to protect him or her from such unprincipled swindlers.

There are but few adults of this age who know enough to preserve their bodies, and, therefore, almost every man or woman we meet is chronically diseased. There are but few who are not the dupes of medical men. The adults of the future need not be so ignorant if the children of to-day are properly educated.

HARRIETTE A. KEYSER.

FLOGGING.—Great surprise is expressed by many editors at Miss Florence Nightingale's advice that English wife-beaters be publicly whipped as a penalty for their brutality. We are not sure that Miss Nightingale recommends this treatment; and before denouncing her, we must have further evidence than "what they say" she says. When we

have the proof, we will discuss the matter. Meantime, we beg to suggest that if Englishmen drank less beer there would be less brutality, less quarreling, wife-whipping, and misery generally. If Miss Nightingale will

fire her anathemas at the cause rather than the effect of English domestic infelicity, and bring her people up to a temperance line of life, she will accomplish much more good than by any number of public whippings.

THE SLAVE-TRADE AND THOSE INTERESTED.



Fig. 1—THE GOVERNOR OF LAMOO.

THE continuance of the African slave-trade, in spite of the protests of philanthropists and of those nations of Europe and America which have authoritatively suppressed it in their own territory, has been the theme of many a denunciation by writers and speakers who have the welfare of the oppressed at heart. England, several years back, professedly discountenanced the traffic in slaves, but has shown much apathy in the matter of setting on foot measures for its suppression. This would appear more clearly from the fact that the majority of those engaged in the traffic as proprietors and masters of slaving vessels, and as contractors for the supply of black labor, were Englishmen.

However, latterly, the English government has evinced some energy, as much, perhaps, to redeem her past negligence as to bring about a better condition on the African coast, where she has acquired certain import-

ant interests. Vessels from her navy have been sent, and persons of rank and well-known ability have taken it in hand to ventilate thoroughly the subject of the slave-trade, and, if possible, so arrange with African rulers as to secure the much-desired result.

The regions visited chiefly by vessels engaged in the disgraceful trade is that along the shores of the Zanzibar and Mozambique channels, and the northern part of Madagascar, and also the Comora and Johanna islands. Investigations made show that the slave-trade had immensely increased of late years, the slaves being mostly sold for transportation to Turkish or Arabian ports in the Red Sea or in the Persian Gulf.

Sir Bartle Frere was appointed Special Envoy in 1872 from England to the sultans of Zanzibar and Muscat, and during last winter and spring, in pursuance of his

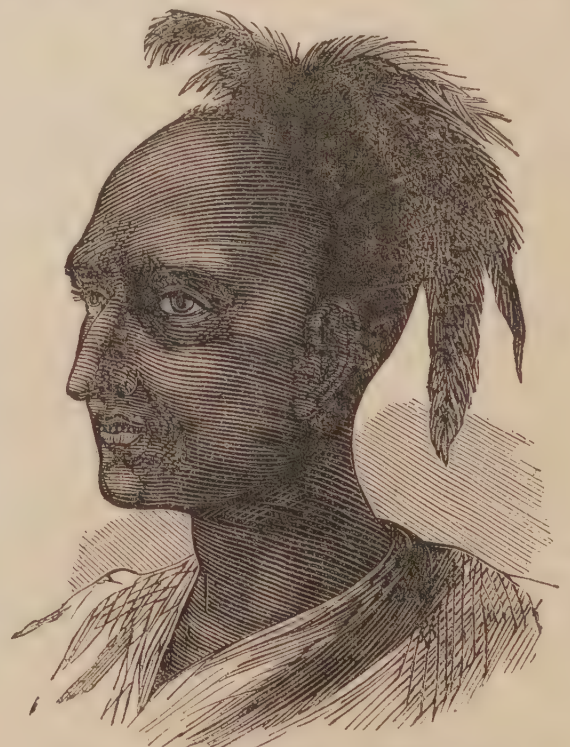


Fig. 2—RESIDENT HINDOO MERCHANT.

mission, he visited several points on the coast and islands of Eastern and Northern Africa,

and is represented as having been eminently successful in securing treaties and promises on the part of most of the African authorities for the suppression of the barbarous busi-

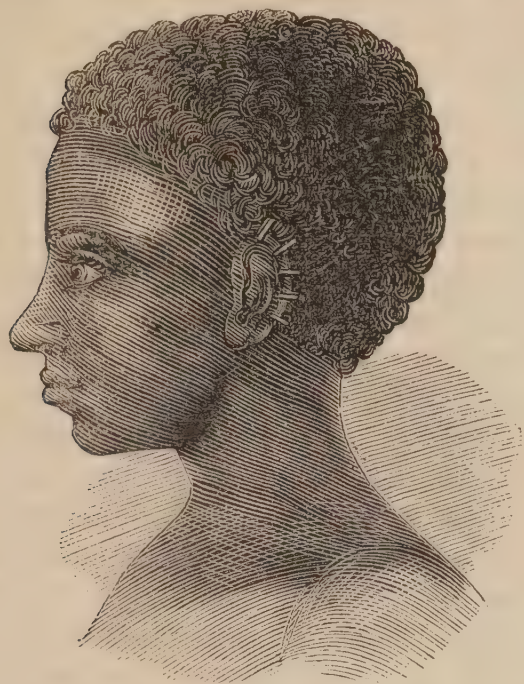


Fig. 3—NATIVE SLAVE BOY.

ness. One of the more important rulers, the Arab governor of Lamoo, on the main land territory of Zanzibar, of whom we publish a portrait, rejected the overtures of the Envoy at first. Sir Bartle Frere had come on a mission of peace and good-will, but was nevertheless well provided with a substantial backing of English cannon. So he urged his suit, and secured the Arab ruler's consent to an ameliorated condition of his miserable subjects. The treaty made provides for the immediate suspension of the transport of slaves throughout his majesty's dominions, for the abolition of all slave-markets, and for the protection of all liberated slaves.

This arrangement was clinched by the Sultan himself, who engaged on his part to faithfully observe its provisions, and do all in his power to see that they are effectually carried out within the territory over which he claims rule. The merchants of Lamoo who have been engaged in this trade in human flesh, have among them, as of special prominence, some Indians from far off Hindostan. One of them, an excellent representation of sharpness, greed, persistency, and cunning, figures in connection with this article. It is due to the semi-barbarism of Africa to say that the English mission has found more trouble in overcoming the corrupt and selfish aims of

the foreign traders resident in Africa than in dealing with the native officials.

We have also portraits of some of the stock with which the iniquitous traffic is prosecuted in the shape of two negro slaves, a boy and a girl of the Zanzibar country. These illustrations are said to be fair representations of their originals, and were drawn by a son of Mr. Frere on the spot. As portraits, they do not indicate a very low grade of mentality. Indeed, the material is much too good for slavish purposes of any sort.

If, in connection with the suppression of slavery the better practices of civilization, moral and intellectual culture, which distinguishes Europe and America, would be introduced, there would be developed, in the course of a few generations, a new and important era for Africa.

The period is approaching when all the nations that have good claim to the designation "civilized" will have abolished slavery, and shall no longer permit traffic in human flesh. A united sympathy for the



Fig. 4—NATIVE SLAVE GIRL.

oppressed African, such as free institutions encourages, will do much toward assisting him to throw off the shackles of ignorance and superstition.

INSANITY: ITS MORAL TREATMENT.

BY A LUNATIC.

IN order to understand what are vulgarly called the "tricks of a trade," it is necessary that one should serve an apprenticeship in the line of which he desires an intimate knowledge; and to show that the facts hereafter stated are not mere theories or fancies, I will remark, by way of preface, that I have been for several months an inmate of an insane asylum, having allowed myself to be put under restraint as a help in my struggles for freedom from the habit of using opium.

My personal knowledge of institutions of this character is limited to the one in which I have lived, and as I propose to set before the public some of the mistakes made here, it is but right that I should say, first, that it is considered one of the best in the country, and—so far as means will allow—is conducted on the most improved and liberal plan, as regards its externals; but is deficient most in small things, some so small that many people will scoff at the idea of their influencing the mind, or through it the happiness, of patients.

Of all the ills to which suffering humanity is heir, perhaps none are more difficult of diagnosis or differentiation than those which affect the brain and mind, and even when a satisfactory conclusion is reached, and the peculiar form of mental alienation decided upon, the treatment often baffles the wisest specialists, how great soever may be the diligence and perseverance with which that treatment is carried out. So varied are the forms of disease which manifest themselves in this way, being indeed limited only by the number of cases, that even the successful treatment of one can not be taken as a precedent to guide us regarding another. It is hardly possible to imagine all the circumstances which have combined to disorganize the delicate machinery of one brain, so closely repeated with reference to an exactly similar one, as to produce a repetition of the same phenomena.

We know that every ship launched upon the ocean, or even the smallest pebble thrown into its depths, has an effect upon the whole body of water, imperceptible, perhaps, but

none the less real; and so it is with the brain. Every circumstance of our lives, no matter how trivial, has its influence in determining the susceptibility to disease and the form which it will assume; and as the course necessary to pursue in order to bring back a healthy state must depend much upon the causes of the abnormal condition, it follows reasonably that each individual case demands special study, and that there is as little sense in making general classifications for treatment as there would be in giving the same medicine to a number of sufferers from various disorders of the lungs or bowels.

The powers of mind which distinguish man from lower orders of animal life, and which raise individual men above their fellows, have, justly and from the earliest times, been held in veneration, and, on the other hand, no human being is more pitied than one whose mental powers and faculties have suffered from disease or injury. Indeed, this feeling, common to all decent people, is, as we know, a point of religion among some savage nations, they believing that those unfortunates, whom we in a sort of pitiful scorn call "foolish," are under the special protection of the Good Spirit, and they are called "gentle" ones.

I do not propose to discuss pathology, or to go into the therapeutics of insanity; nor would I take upon myself to advise or even suggest changes; my purpose is to speak of some of the things I have seen and felt while in an asylum, leaving the inferences to be drawn by the reader, for only by public attention and demand can any change be brought about. My object is, not to speak disparagingly of this institution, but to warn parents and guardians not to confine their loved ones in any place of the kind until such place has been visited by some friend, who will take the trouble and insist upon knowing how the place is *really* carried on, and not simply be satisfied to be shown the parlors and apartments, which are fitted up only as an advertisement.

Private or corporate establishments of this kind are carried on for the protection of society against irresponsible persons, to prevent

such persons from injuring themselves, for the curative treatment of mental disease, and perhaps rarely to carry out some whim of one who makes insanity a special study or benevolence, and has the means of so doing. To make money may be the chief aim of some, but of this it is needless to speak.

Of the maniacal and violent forms of insanity I have nothing to say, for, with the exception of one or two cases, I have seen them treated with universal kindness, and with as little severity as possible. My remarks pertain only to that class found in the best apartments of an asylum, those who are victims of alcohol, opium, or sunstroke, or who suffer from any one of the many forms of emotional insanity, this latter term being only a technicality for what is called in society "peculiarity," or "idiosyncrasy." The greater number of such persons are either aware of their condition, or are insensible only in regard to one subject, and many place themselves voluntarily under restraint, either with the view to getting rid of their disease or habit, or to relieving their friends from anxiety and the pain of seeing suffering which they are unable to check or alleviate.

One of the greatest mistakes, one for which there is no excuse, and which is never forgotten by the patient, arises from the misstatement of facts by the family physician. This may be from ignorance on the part of the man who advises parents to shut up their sons and daughters in a retreat, or it may be from a desire to overcome a natural reluctance on the part of patient and friends to have anything to do with such a place. But whatever be the reason, there is no excuse for it. No physician has a right to send his patients to a mineral spring unless he knows what effect the water will have upon their systems; nor has he the right to shut them up in any establishment unless he knows what treatment they will receive there. The profession generally is altogether too careless in this matter. Dr. Smith, Jones, or Thompson is invited by the superintendent of a retreat to visit it. He does so, and is shown over the pleasantest parts of the buildings. His attention is called to the carpets, easy-chairs, apparatus for heating, method of ventilation, and the commodious and well-appointed arrangements for sleeping and

eating. He has pointed out to him the beautiful views from the windows, and is told that the lawn which slopes so gracefully toward the river, which is dotted here and there with pretty groves, and which looks so green and bright, is the play-ground and walk for the patients. Thus he is pleased and charmed with everything, and as he departs and expresses his satisfaction to those who have conducted him around, he perhaps hints at sending some of his patients hither, and he is instructed to tell the friends of all patients that correspondence will be allowed the inmates, and that their friends will be permitted to visit them as often as they like.

But his attention is not called to the fact that the sashes of the windows through which he has seen such beautiful views, though painted to appear light, are in reality solid bars of iron; nor does he notice that the doors have no latches upon them, but have strong locks and keyholes only on the outside. He is not told that every patient is locked into his room at night, or that he is allowed to go out in the grounds only with some one to watch him all the time. He is not informed that the attendants, instead of being what their name indicates, are more like overseers, and delight in thwarting the most innocent efforts for comfort or amusement, if such efforts do not meet with their approval. In short, everything is shown at its best; the worst is not seen, and the everyday discomforts are not allowed to come in view; so the doctor is permitted to go away with the impression that patients follow out their own inclinations in the main, and that though a watchful care is constantly exercised over them, it is so wisely and thoughtfully exercised that the patient never feels a galling restraint, unless he attempts to break rules. This erroneous idea is retailed to individual patients, and they find out their mistake only when they hear the click of the key which makes them prisoners. By a strange coincidence I found that among my fellow-inmates the majority had been told before coming that they would not know but that they were living at the Fifth Avenue Hotel except for the very gentle restraint which would be, of course, necessary to keep patients in health. Nothing seems to me

more unfortunate than thus at the start to allow a patient to feel he has been imposed upon, for it renders him suspicious of every one, and throws over him a shadow which only time can remove.

Most patients go to an asylum during or immediately after some acute attack, or at least in a weak and enfeebled condition, and I have been careful to notice their first impressions when they come to themselves sufficiently to appreciate their surroundings. In every case the same feeling has been observed, namely, utter helplessness, and the conviction of having been fooled. Added to this is another, difficult to describe, but terribly real to the sufferer—that of being treated as if he were crazy, and being constantly galled by unnecessary restraint, will, in time, actually unsettle the mind. This latter thought gradually becomes less painful, but it is from absolute despair rather than a cheerful resignation.

The physicians in charge have too much power. In some few particulars they have not power enough, as, for instance, in the fitting up of rooms, and in regard to the food. The trustees of an establishment leave all such matters to their servant, the steward, and he is responsible to them only. But how rarely do trustees bother themselves with details! They look at the quarterly report, believe implicitly in its stereotyped expressions, and then forget all about it until next quarter. There is no doubt but that internal affairs should be left entirely to the doctors, and subject to public inspection at any time. But while their power is quite limited here, they have altogether too much in regard to the little things which make up every-day life, and can, if they choose, make life a burden by the constant exercise of their authority in these particulars. They are but men, and are just as prone to have their favorites as any one else; and as there is no appeal from them, those who are unpopular or disagreeable among the patients must submit to interference and injustice simply because they are unable to help themselves. All letters written by patients are read before they are posted, and such remarks as policy may dictate are appended, and letters which arrive are delivered, intercepted, and sent to the friends of patients, or allowed to lie in-

definitely in the office, as may seem good to the powers that be.

When friends come to visit any one, they are first "interviewed" by one of the doctors, who, if he thinks it fit, tells them that he fears seeing them would excite his patient, and that they had better put off their visit until some other time. If a patient has reason to complain of anything, and shows the least vexation or impatience because it does not receive attention, his friends are sometimes apprised that he is not very well, is in a highly excitable state, and it would be better for them not to see him or write to him for a while. Thus with a strong hand is the poor victim crushed into submission, or, at all events, taught to conceal his feelings. Can it be that the real reason for this is the fear that outsiders will learn what their friends inside have to endure? As long as there is no one to inquire whether power is abused in these places, so long will this state of things exist, and the only comfortable or contented inmates will be those who have lost the ability to discriminate between kindness and wrong.

The doctors do not pretend to give reasons for their actions, or explain to patients why requests are refused.

I must again ask the reader to bear in mind that I am speaking, not of "crazy" people, but of those whose minds, if at all impaired, are so only on certain subjects, while in other respects they are as sound as any one.

From the moment one enters an asylum he is treated as if he were devoid of reasoning faculties, no matter how slight may be his trouble. Thus a man whose failing is an unfortunate desire for alcohol or narcotics has to submit to dictation in the simplest matters of dress. As though suspected of suicidal impulses, everything is taken from him, even his penknife, and he is locked into his room at night like any felon or madman. If he makes a request for some privilege, concerning the fitness of which he is as well able to judge as any one, he is very probably refused, and no reason is given.

One who has never experienced such a fate can not imagine how exasperating it is to feel that everything said or done by him is looked upon as an evidence of insanity.

If one laughs when amused, it is exaltation; if moved to tears by reading some pathetic tale, it is depression; if he eat heartily, he has a morbid appetite; if he eat little, it is melancholy; if he dress well, it is because vanity is a symptom of his condition; if he dress poorly, it is carelessness from the same cause. Every act and word, however trivial, he knows may, at any moment and at the pleasure of the doctors, be construed into a symptom of mental derangement. In fact, these gentlemen seem to feel they must think for every patient and deprive him of all individual responsibility.

This leads me to another point, which is, the doctors use no discrimination in the treatment of entire dissimilar cases. I am not speaking of public asylums, which are supported by governments, but of private ones, where patients pay from ten to one hundred and seventy-five dollars *per week*. I have shown above how impossible it is, from the nature of things, to treat any two cases of mental derangement exactly alike with any hope of success. One person lacks self-control, another self-confidence; one is ever in boisterous spirits, another always melancholy and sad; one is kept in a constant state of mental excitement by close restraint, another is never comfortable unless some one is near to watch over him. So through the endless variety of troubles there are features in each case which make it to differ from all other cases. And is the moral and social treatment varied to suit all these differences? By no means. With the exception of cases of favoritism, all are treated alike. The man who pays ten dollars is just as well off as the one who pays fifty; and about the only difference between these and the one who pays the snug little sum of one hundred and seventy-five per week is, that the latter has several rooms instead of one. But he is as close a prisoner as the rest.

These different prices are a humbug to a great extent. I have known a man who paid thirty dollars a week have a room not so well furnished as one who paid twenty-five and another who was charged forty had for the extra expense a single gas jet in his room. Whether the price paid be ten, twenty, fifty or more, the food is no better in one case than in another, and the privileges are the same.

I know that a man who requires restraint has to be so treated whether he pays much or little, and I speak of the money matters only to show that patients have to pay well for what they receive, and that the doctors have no business to treat them as though they were charity patients or malefactors.

If asked why the parlor-hall patients have no more liberty than others, and why no distinction is made between those who are unsettled on a single point and those who are altogether irresponsible, the answer will be: "We must treat all alike to avoid hard feeling." When one man can pay only ten dollars a week, and another comes who can pay fifty, do they tell him that they "must treat all alike," and so will charge him only ten? Why not, with as much reason, give the same medicine to all?

It will be evident to the most casual observer of mental derangement that the chief means of cure is entire change and freedom from exciting causes. Except in acute pathological conditions, or during the course of some intercurrent disease, drugs accomplish but little, and dependence is placed, for the most part, upon rest, exercise, and regularity in all habits. As I have said before, an establishment of this kind is supposed to have at command the means of giving to each patient all the attention which his particular case demands, and if out-of-door exercise is what he most needs, and he can not be trusted without some one to watch him, it is but shirking a duty to give as an excuse for not letting him out, the scarcity of attendants.

With some who allow their minds to dwell constantly on one subject, the theater, opera, or kindred amusements are well calculated to divert and thus do good, but because another patient would not be benefited by such recreation, is it a valid excuse for depriving the first of it? If the handling of cards bring painful and exciting scenes to one man's mind, should others be obliged to give up their evening "rubber" of whist? It seems to me that when men make it their special business to furnish an institution with all that is needful for the accomplishment of an object, it is hardly right to plead a want of means for so doing after patients are secured.

Another point germane to the subject of

favoritism of which I have spoken is, medical men of any prominence who chance to be patients, often have access to the case of books and make use of knowledge so derived, to the great discomfort of other patients. One instance will serve to show what I mean. A young man was subject to epilepsy, but was not aware of the nature of his difficulty, until, one day, a doctor, who was a fellow-patient, spoke in a sneering way of it in his hearing. The result was, his mind dwelt so long upon the subject that he had a relapse.

The doctors are not always entirely truthful, and do not act honorably toward their patients. Concerning the right or propriety of telling untruths to those who can not tell what is false, or of practicing deceptions with those who are too much deranged to ever suspect it, I have nothing to say; but to employ underhand means toward patients who are fully aware of what is going on around them, is neither justifiable nor proper.

If a patient has in his possession a knife, or money, a watch, or jewelry of any kind which they wish to take from him, do they, in a straightforward manner, go and ask him for such article, and explain the reason for taking charge of it? Not at all. In the night, when the patient is asleep, a man is sent into his room and his pockets are emptied, and no explanation is made.

A man is allowed writing materials, and while absent from his room his diary or manuscript is examined. If some article of dress is disapproved by them, do they, in a polite and kind manner speak of it to the person interested? No; but they give orders to an attendant not to allow such article to be worn again. They open and read letters without giving any notice of it to those interested, and they write to friends that a patient is sick and unable to see them when it is not so. Does not this sort of thing receive rather a hard name outside of such places?

The result is just what might be expected. Instead of regarding the doctors as friends, who are anxious to do the best for them, patients look upon them with contempt for their petty cheatings and meddlings, and though from policy they endure the formal handshakings every time a doctor makes his rounds, and smile and look pleasant, it is

but to mask their real feelings, for their acts are despised, and they looked upon as tyrants.

Any faculty or power is strengthened by use, and where men or women find that not the slightest confidence is placed in them, that nothing they say is believed, and that the commonest courtesies are withheld from them, the effect is anything but beneficial. And then comes ever the terrible thought, "I am entirely in their power. If they choose they can keep my friends from me, and keep me in close confinement. They can abuse me as much as they please, and I am powerless;" and finally the most terrible of all thoughts: "They can drive me crazy and thus conceal their cruelties."

Here is found, in its perfection, that *suaviter in modo, et fortiter in re* which so closely resembles hypocrisy, and one of the hardest things to bear with patience is the dissimulation which is so generally and unblushingly practiced. When daily rounds are made, and especially when visitors are present, the manner of the doctors is most unctuous and affable; but when bolts and bars are between them and their victims they apply pressure through the attendants. To one's face they promise, or at least do not refuse, to grant requests, but once beyond the patient's reach the matter dies. Every one is treated in that humiliating and exasperating manner, which says more forcibly than words can express it, "Poor fellow! I must not excite you by contradiction, and as you are not aware what you are talking about, I will promise anything you like, for you will not remember it."

But I fear I am exceeding my limits, and I must bring this to a close. I might go on enlarging upon matters which look trivial on paper, but which are important to those who are shut up in asylums. I will, however, touch on one point more, which is: the doctors are not careful to keep themselves informed of the way in which patients are treated by the attendants. Seeing so much of fraud and deception carried on by their employers, the employed very naturally do the same, and knowing that they will always be believed before the patients, they do not scruple to commit acts which amount to actual cruelties. They are overbearing, harsh,

and unjust, and when there is danger of their being reported for it, they club together with some story which always places the patient in the wrong. They drive patients about like slaves; if any games are going on they always play, no matter how many are excluded by it. They help themselves first at table, and leave others to help themselves. Not usually being, in any sense of the word, gentlemen, they are ignorant of the first principles of politeness, and their great idea is that their keys give them the power to do as they please.

For the first few weeks of my stay in an asylum, I felt that all these things would drive me mad, for I was in a weak bodily condition and very nervous and excitable, and was tempted then to write much more strongly than this, but I concluded to wait until I felt stronger and cooler, and meantime to find out how others felt under the same system. During the time, in looking over the books of the library, I came across many pencil marks which showed the same agony of mind which I experienced, and which I found to be universal with patients, and finally decided to make public these matters, hoping to attract attention to the end that those who have friends in such institutions should take more pains to find out the real state of affairs, and, if possible, some more general means should be employed to bring about a reform.

The following expressions I find in the margins of books which have been read by patients, both male and female, and I need not say they speak for themselves: "To think they are determined to make me crazy whether I am or not!" "Oh, my mother, it has made me crazy to come here!" "Oh, my mother, would thou hadst known how dreadful it would be!" "Such unutterable misery!" "Everything I say is turned against me!" "My God! if thou dost not help me, lift up my soul to thee—I shall go mad!" "My hope is dead." "Oh, the agony of being thought crazy!" "God help me keep my reason!" "Let me die rather than lose my reason!" "Oh, my friends, you know not what you have done!"

These are but samples of a multitude of similar notes, and written by those who are fully sensible of what they are writing. The

doctors will tell you that this is very common, and that such things must be taken only as showing the peculiar form which insanity sometimes takes. But those of us who suffer know better, and we ask the public to inquire and learn for themselves what is the truth.

BRAIN EXHAUSTION.

DR. RADCLIFFE'S third lecture in the recent Croonian series is an able and thorough discussion of the subject of "brain exhaustion." It has been fully reported by the English medical journals, but we are indebted to the *Boston Journal of Chemistry* for an abstract of it, from which we make the following selections. After describing the leading symptoms, such as loss of memory, depression of spirits, increased or diminished sleepiness, unusual irritability, epileptiform condition of the nerves, and sometimes transitory coma, Dr. Radcliffe proceeds to consider its prevention and cure. With reference to diet, he disagrees with those who believe that meat is food, *par excellence*, and that little other nutriment should be taken. He thinks a properly mixed diet better in the generality of cases; and that the present practice of urging persons at all weakly, especially children, to eat as much meat as they can, may have not a little to do in developing many nervous disorders, and in deranging the health in other ways—perhaps in causing liver and kidney and other glandular disease by over-taxing the eliminating powers of these organs.

The question of exercise is equally important. Too much walking may be one cause of a break-down in health. It often seems as if the amount of vital power at the disposal of the individual does not allow of much head-work and leg-work together, though quite sufficient to allow of a fair amount of either singly. Under these circumstances, if the head-work must be done, it is expedient to avoid walking exercise rather than to seek opportunities for taking it, and often to settle down in an easy-chair and take a nap rather than to walk at all. A person suffering from cerebral exhaustion often finds that he can stand or walk only for a short time, and that, if he persists, he

soon becomes faint and breathless, and unable to talk. In such a case, walking exercise, however moderately indulged in, is often followed by inability to keep the thoughts to the point, or by distressing drowsiness or actual sleep, the walking having brought on head-symptoms which were not previously present. Dr. Radcliffe is convinced that, in many cases, persistence in walking and standing has had much to do, not only with bringing on and keeping up a state of cerebral exhaustion, but with pushing matters to the crisis of hemiplegia.

Again, in regard to head-work, *rest* may be too much insisted upon in cases of cerebral exhaustion. What is wanted, generally, even at the beginning, is, not that the work should be given up altogether, even for a short time, but that it should be moderated in amount or changed. It is a grave mistake to let the mind lie fallow, even for a short time, not only in the particular case under consideration, but in all cases where head-symptoms have to be dealt with—in epilepsy, for example, no less than in cerebral exhaustion. Of course, this notion may be carried too far. Undoubtedly harm may be done by pressing the necessity for work too strongly; but practically this danger will prove to be small in comparison with that of letting the mind lie fallow.

With regard to *sleep*, the recumbent position has obviously very much to do with it. Undoubtedly sleep may occur in the sitting posture, and even while standing; but these cases are exceptional. It is certain, also, that sleep in bed is generally sounder with a low pillow than a high one. If, therefore, there be a state of wakefulness at night, the head should be kept low; if, on the contrary, there is undue sleepiness, the head should be kept high. The degree of sleep, and its amount, may be regulated by simply taking care that the head is in the right position. If prolonged recumbency is a necessary part of the treatment, the tendency to sleep too much during the day and too little at night may be thus corrected. As a rule, sleep may be conciliated and regulated in this way without the assistance of narcotics. But it must ever be remembered that the diet must be regulated with reference to the condition of the nervous system.

THE MOUND-BUILDERS.—I have been intending for some time to write you in regard to the traces of the ancient people of this country, and am glad Dr. Manville has opened the way. I at one time had quite a collection of skulls, bones, etc., for it is a very common occurrence to find these remains. The country would appear to have been at one time a large graveyard, especially the gravelly or sandy knolls which abound in various parts of the country. One in particular, known as Ground Hog Ridge, one mile north-west of this place—Ada, Ohio—contains numerous remains from three to eight feet beneath the surface, and covered by a primeval growth of timber. Nearly three years ago, a party of men engaged in building a pike through this place, in stripping the soil from considerable surface to expose the gravel underneath, uncovered a number of almost perfect skeletons. They were placed in a circle of probably twenty feet in diameter, feet to the center. Charred remains of a fire occupied the center, and a crust of ashes, etc., was quite distinct, as though the place had been used for a long time. No other remains besides the bones were found; no arms or clothing, if we except the flint arrow-heads. The soil and earth are three feet deep to the gravel, and these bones were at least three feet in the gravel, making them six feet beneath the surface. I did not measure any of the skulls, but they were of very ordinary size and shape; the teeth, with a few exceptions, being worn down and decayed, showing them to have been at full maturity, probably at great age, when buried. I hope to hear from others on this interesting subject.

G. B. M.

[The first of a series of illustrated articles on the "Mound-builders," their character and remains, by a traveler and explorer, will appear in our February number.—ED. A. P. J.]

ANOTHER TUNNEL THROUGH THE ALPS.—The St. Gothard Railway Company has just signed a contract for the construction of another tunnel through the heart of these mighty mountains at a cost of \$10,000,000, to be completed in eight years, \$1,000 per day to be allowed for each day of completion in advance of the termination of the time stipulated. The constructor is M. L. Favre, a Frenchman, said to have been a Parisian carpenter, but risen to fame by industry and ability.



NEW YORK,
JANUARY, 1874.

SALUTATORY.

DO we PROGRESS? All societies are made up of "many men of many minds." As we differ in organization, in age, and in circumstances, so we differ in feelings, in opinions, and in sentiments and beliefs. For our present purpose we will divide society by an imaginary line into two classes, and examine them on this question, Do we—mankind—progress, or does the race retrograde? and it will then be seen *why* one takes a hopeful, and the other a hopeless, view of the question.

In the early youth of a person, when he is growing in strength, knowledge, and power; when he is on the rising tide, he sees life only in its brightest and most promising aspects. All is then youthful, healthful, cheerful, joyous, delightful! Life is bliss indeed. He is young, with only such light cares and duties, we will suppose, as serve to energize, exhilarate, and give zest to thought and action. He is filled with high aims and godly aspirations which a loving mother and a doting father kindled in his young soul. Brought up with temperate habits, taught self-reliance, order, application, integrity, and faith in the Divine promises, how could it be otherwise than that such a one should believe in the principles of PROGRESS AND IMPROVEMENT? Such a nature will appreciate the changes for the better which

have been and are being wrought out in our modern civilization. Are not science and religion making rapid strides in discovery and dissemination throughout the world; the telescope and microscope revealing new worlds invisible to the unaided eye? Are not these in the line of progress?

In civil and political affairs the world is struggling for improvement; monarchies are giving way to republics; slavery to freedom, and all heathen nations—instance China, Japan, India, Africa—are all opening, through explorations and commerce, to Christian influences!

Consider the improvements making in mechanism. New inventions, intended to lessen human labor, develop human comforts, and to save and prolong human life, are constantly being made. Look at the health and sanitary reforms to prevent, control, or eradicate plagues and epidemic diseases! Better drainage, cleansing measures, and ventilation may now be seen in all civilized countries than were known before. Hygienic principles are being taught, and people are learning how to live healthfully and long. There is, most assuredly, substantial progress in this.

Free schools, in which all children shall be taught, are extending in all our States and territories. Children, white, black, and red, must now be qualified to become citizens and take their place under the Government. Negroes, once slaves, now earn their own living, and readily fall into line in the general march for self-support, independence, and to assist in the defense of their homes and the nation. So it must be with our Indians. They must be permitted to buy homes for themselves, and *required* to labor and to earn their own support. Why should the more industrious be taxed to support an able-bodied class in idleness? Those who believe in PROGRESS will de-

mand such a change in our Indian policy as shall exempt the hard-working white man and negro from being taxed to support, in idleness and vice, the pauper red man. "Equal rights" and "fair play all round" are claimed by every American citizen. Why should not the Indian work as well as the negro or the white? A simple, common-sense policy will set this matter right, and the people be relieved from a useless burden and the Indian be taught the arts of industry and self-support.

Our prisons are being converted into reformatories rather than schools of vice and crime, as formerly, from which the culprit usually graduated a hardened, hopeless criminal. He now has, or is to have, opportunities for improvement, so that when his time of restraint shall have ended he may go forth into society, not worse, but a better man than when he entered. This, too, is progress.

Our asylums aim, not simply to confine and keep the poor, warped creatures with softened brain and dethroned reason, but, by a better knowledge of the causes and cure of insanity, to restore the patient to health and reason. It is not many years since when an insane person was supposed to be possessed of a devil, and was kept in a strait-jacket or chains, locked up in a lonely, dismal room or pen, and treated worse than a brute. It is not so now.

The imbecile, the idiot, the deaf, dumb, and blind are being educated, developed, and many are rendered self-supporting. There is great progress here.

How is it in our great industries? Consider the millions of farms and homes which have been established in our country during the past few years. New States have grown up and now take their places in the nation. Railways, telegraphs, and post-offices put one part of the continent into immediate communication with every other, and

with the world. There is progress in this.

The objector here may say, O, yes; we have farmers and we have railways, but they do not agree. One would eat the other up. One interest clashes with the other. How about this? We reply, there is sharp competition here, no doubt, and yet the one interest is indispensable to the other. It is the same in other things. A manufacturing country desires protection by tariffs, while an agricultural country desires free trade in manufactured articles. It is the duty of legislators to harmonize and reconcile these conflicting interests, and to aid in the highest development of the whole country. Equilibrium will soon be established in these as in other interests.

In mental science we find more interest manifested than ever before. It is discussed in conventions, social science meetings, in the pulpit, and in the press. Men are dissecting the brains of bird, beast, and man, to determine what are its exact functions in whole and in part. Electricity, the galvanic battery, magnetism, and the microscope are used in these investigations. Whatever observations in the past may be confirmed; whatever new and useful discoveries in the present or future may be made in these studies, shall be given in the pages of the PHRENOLOGICAL JOURNAL. We hope to be able to report more progress during the year 1874.

And now, a few words in explanation as to why a considerable number of intelligent men do not believe in the principles of progress, as claimed by the foregoing:

- 1st. They are sick.
- 2d. They are hopeless.
- 3d. They are on the down-hill of life.
- 4th. They have been disappointed; were ill-born; have bad habits, which render life miserable.
- 5th. They are not happy at home;

they scold, fret, chafe, whip their children, quarrel with their wives and neighbors, curse the churches, and have more of hell than of heaven in their souls. *They* believe in *retrogression*, but not in *progression*. They will refer you to the increase of drunkenness, licentiousness, gambling, theft—and practice them; deplore the increase of crime, while they themselves violate the Commandments. This class feel quite sure we are all going straight to—the bad.

6th. Then there are the old practical fatalists, who believe it was fore-ordained that certain persons should be born to perdition, while others—only a few, the elect—should be saved. They teach that—

“You can and you can’t,
You shall and you shan’t,”

and so forth. We can have no controversy with this class, for the reason that *we do know all men to be capable of improvement, and of growing in the grace of God.* This we know independently of any Scriptural revelation. It is inwrought in the very constitution of man. Then, long after man came into being, the Holy Scriptures were given, and are *in accordance with the constitution of the medium through which they were spoken.* God made man in his own image, and He made him just as He wanted him to be. He gave man the Scriptures for his guidance; and, when rightly interpreted—aye, *rightly* interpreted—it will be found that the Bible is, indeed, the “Book of books,” and he that lives in accordance with its teachings will become a perfect man.

Thus, it will be seen that there are good and sufficient reasons why one class should believe in progression, and another class should take the opposite view. One is well, the other is ill; one is temperate and virtuous, the other is intemperate and vicious; one is on the rising tide, the other is drifting out to a

hopeless shipwreck; one believes in the goodness of God, the other is faithless, except in regard to death, hell, and eternal punishment. And thus it will be seen that there *are* “many men of many minds;” and so it shall ever be, until a knowledge of the truth as it is in Revelation and science has lighted up the whole world.

The *good* in man, or men, predominates over the evil. Honesty is not only the best policy, but it always—in the long run—out-generals and conquers dishonesty. Man’s moral sentiments and intellect master and subordinate his passions and propensities. God has given us faculties, powers, and a way of escape to all who wish and will.

We believe in “progress and improvement.” This belief is a real encouragement, and cheers us on in our work. It enables us to speak words of encouragement to others, and to stimulate our readers to renewed exertions in the direction of truth, right living, usefulness, success, and happiness.

Reader, are you with us in these views? If so, you have a large field in which to exercise your best forces. You can not be too zealous in extending a knowledge of the principles we teach. Man is to be reformed and redeemed. Science and religion have each their work to do to effect this end. Let us do *our* part soon, that it may be said of us, “Well done, thou good and faithful servant.”

THE HOLIDAYS.

THANKSGIVING, Christmas, New Years! The first means gratitude to God for His numberless blessings. The second means the birth of Christ, who came to teach the world how to live, what to do, and how to die; to reconcile man to man, and to his Maker. Those who follow *His* teachings can not

go wrong. The third holiday, the New Year, is the point of time from which we date all our affairs, important and unimportant. New resolutions to drop bad habits and to lead better lives are made; new enterprises are entered upon, old accounts are settled, presents are distributed, and a happy New Year should be generally entered upon. Thanks, thanks, thanks are, or should be, in every heart and on every tongue. Evergreen trees and beautiful wreaths now decorate churches, dwellings, and places of resort. Each caterer vies with others to produce "his very best" for these holiday occasions. A time of rejoicing prevails throughout the world. Civilization is advanced, Christian fellowship is enlarged, brighter prospects are opened to individuals, the period of penal restraint is shortened, and the race is happily

"A year's march nearer home."

Let us make the most of *all* our holidays. Why not make holidays of *all* our days?

THE USE OF IT.

SUPPOSING it to be true, what is the use of Phrenology? Are not our heads and brains made for us? We do not make ourselves, and can we alter or change that which is already made? In other words, is not our organization and our course in life predetermined and fixed for us? In short, are we not fated? We reply: We do come into existence according to established law. We inherit the conditions, physical and mental, of our progenitors. If they be tall or short, light or dark, virtuous or vicious, temperate or intemperate, we, their offspring, will inherit tendencies in the same directions. But when we come to years of discretion we *may* change our course, and instead of following where our inclinations would lead, we *may* choose a course for ourselves. While

some float down the stream with the current, others row their boat across the stream; still others go *up* the stream, *against* the current. In other words, the one yields to his appetites and passions, the other restrains and overcomes them by self-denial, and, at the same time, develops other, we may say, our higher faculties and powers. When one understands himself, and realizes fully what are his natural tendencies, his besetting sins, his proclivities to excess, he is the better enabled to put on the brakes, to regulate his conduct, and become master of himself. A knowledge of these principles also enables us to take the measure of strangers when we meet them; to guard against being imposed upon by impostors, swindlers, and pretenders. It indicates to each one what he can do best; whether he should be educated for a minister, or whether he should become a mechanic; a physician, or a policeman; a soldier, or a sailor; a merchant, or a musician; a surgeon, or a surveyor; a banker, or a butcher; a painter, sculptor, speaker, author, printer, publisher, phrenologist, lecturer, or a grower of stock, such as horses, cattle, etc., or a grower of fruits and flowers, or of farm crops. With this knowledge Mr. A. is pointed to one calling, to which he is by nature and organization best adapted, and Mr. B. to another. Following these directions, they will be far more likely to succeed in life than if they blindly follow in this pursuit or that without any special fitness therefor. Furthermore, it classifies children in schools, according to temperaments and capacity, and so disciplines them as to bring out deficient faculties, and restrain those in excess. It softens the hard and turbulent, and hardens the soft and timid. It teaches what temperaments and dispositions are best suited to each other in the matrimonial relations, so that there may be

more perfect adaptation and compatibility between husband and wife and their children, and that children shall be improvements on their parents. A knowledge of Phrenology and Physiology would secure these ends. Can anything be more beautiful than a well-constituted and perfectly organized family? What is there in all the world more beautiful to contemplate? This is the beginning, it may be, of a colony, a state, or a nation.

The proper application of these principles to legislation would at once weed out the rogues from places of trust, and put them away from temptations, which they do not withstand. Statesmen would then be selected for legislators, while pot-house politicians would be left to take care of themselves, or to earn an honest living. Honest men would be chosen to manage our banks, our post-offices, our custom-houses, and other places where intelligence, integrity, and vigilance are required. Defalcations would then become rare, indeed, if one ever occurred. We now have forgers, tricksters, and thieves where we ought to have only honest men. Phrenology would indicate at a touch who had, and who had not, large CONSCIENTIOUSNESS. If it be objected that good men sometimes become perverted, and that, therefore, Phrenology is not in itself a sufficient test, or guide, we reply: Use it so far as it may be used, adding such knowledge as may be acquired by common observation, to learn the private habits of each public character or aspirant for office. Does the man drink, smoke, and chew tobacco? then he is less clean than one of similar organization who does not indulge in these perverting substances, and he should be left out. A man who accepts public office is open to public criticism, and the Civil Service reform should be rigidly applied to every candidate. Is it probable that

such bold, bad men as now disgrace the nation would ever be permitted to occupy seats in our Congress or our State Legislatures? Is it not notorious that we send pugilists, boxers, bullies, gamblers, shysters, libertines, and even drunken drivelers to seats of honor, and to those high places which they only disgrace? Need these be continued? Is this in accordance with the genius of our democratic-republican institutions? Can a nation perpetuate itself through such representatives? When the people can judge by scientific tests who is who, they will vote for the best, rather than for the worst, men in a community. To the unfortunate, the perverse, and the bad, Phrenology says: "You can improve, you can overcome your tendencies to evil, can better your condition, and come up out of the passions to a higher plane, and Phrenology shows how. The devil never sets a trap so cunningly, nor tempts one so severely, that he may not escape, if he so wishes and wills. We—most of us—not only *fall* into temptations; we actually *seek* them. Need one lie, steal, gamble, smoke, drink, fight, rob, or kill? If one makes the drinking-saloon or tap-room the place of resort, he thereby invites danger, and it will sooner or later clutch him by the throat, and hold him fast in the grip of destruction and death. But, if he seeks growth in grace, through the exercise of his moral, religious, and spiritual sentiments; if he takes an active part in religious exercises, in the church, Sunday-school, lecture-room, etc., harm is not so likely to overtake him. Who ever heard of one being shot, stabbed, or knocked down in a Sunday-school, a library, a church, or in places where men gather for worship or for mutual improvement?

We must seek such associations as will prove helps, not hindrances, to growth in grace. Roads which lead to virtue and vice are as diverse as those which

lead to heaven and hell. A knowledge of Phrenology points the way to all that is desirable, all that is improving, encouraging, high and holy. Ignorance of these principles leaves one to grope his way in comparative darkness, stumbling and blundering as best he may; now succeeding, now failing, he counts all things as mere luck or chance not seeing clearly that the one course is sure to be successful, as the other is certain to be unsuccessful.

Again, when one knows his own powers, when one knows just what to expect from others, he is prepared to go forth and work his way up in the world, nor will he be disappointed. He will attain all the success which his powers of mind and body render him capable of attaining, and this is the "Use of It." •

NATIONAL CENTENNIAL.

IN 1876 we shall be, as a nation, a hundred years old! Is that all? Yes; but where before, in all the world, did a nation attain to a population of FORTY MILLIONS of people in so brief a space? Nowhere! The old monarchies of Europe have all along predicted—and tried to procure the accomplishment of their prediction—that the "American bubble would soon burst," and the Democratic Republic come under priest, pope, and king. We are in a fair way of disappointing these enemies of freedom, and for establishing our rights to govern ourselves according to our own choice. We will prove to the world that America is indeed a free and independent nation; an asylum for all persons who prefer liberty to bondage; freedom of conscience to submission to priestcraft, kingcraft, or any other craft intended to fetter and dwarf the development of the human mind.

Philadelphia, our sister city, founded

by William Penn, and whence was issued our Declaration of Independence, is the chosen place for holding the hundredth celebration on the 4th of July, 1876.

In connection with this celebration we are to have a World's Fair. Invitations are being sent out to all the world to come and see us, and to bring their best productions of toil of hand and of brain. We will publish the programme in a later number. We simply wish to notify our readers to be thinking of the matter, and to get ready to "put their best foot forward," when the time comes. One will exhibit a little the best steam-engine ever invented; another, the best printing-press, etc. The Old World will be here, to compete with the New. Over the water they have traps to sell as well as we, and will try to carry off all the medals of merit. We must show fair play, and do exactly as we would be done by. But we are not afraid of results. Our inventors are alive to the importance of this thing, and will leave no stone unturned to secure success. We believe in competition, and invite it in the interest of industrial enterprise. Our yachts brought home the prize-cup from the old country a few years ago; and we received at London, Paris, and Vienna our full share of "rewards of merit." But the grandest thought of all is, that we are to celebrate our hundredth birthday. The significance of this is great. A free and independent nation of 40,000,000 of people, occupying the finest portion of the globe for soil, climate, and the richest minerals; with 50,000 miles of navigable lakes and streams; our territory stretching thousands of miles between the two great oceans, with more railways, telegraphs, school-houses, and newspapers than any other nation, all of which are constantly extending—why should we not thank God that our lot has been cast in this happy, glorious land?

We congratulate Philadelphia and the nation on the prospect. She will reap a rich harvest during the great exhibition, and, we doubt not, prove herself worthy of the opportunity and a credit to the nation. Let us all help to produce the best exhibition and the grandest celebration the world ever witnessed.

THIRTY REASONS.

THE late David Paul Brown, not long before his death, made an argument in favor of prohibiting the sale of ardent spirits, in which he most completely demolished all "constitutional" and financial objections, and gave the following thirty reasons why intoxicating liquors as a beverage should be prohibited by law.

Mr. Brown asks all to join in the practical enforcement of the doctrine, that the sale of intoxicating drinks as a beverage should be prohibited by law, because: 1. They deprive men of their reason for the time being. 2. They despoil men of their highest intellectual strength. 3. They foster and encourage every species of immorality. 4. They bar the progress of civilization and religion. 5. They destroy the peace and happiness of millions of families. 6. They reduce to poverty virtuous wives and children. 7. They cause thousands of murders. 8. They prevent all reformation of character. 9. They render abortive the strongest resolutions. 10. The millions of property expended in them are lost. 11. They cause the majority of cases of insanity. 12. They destroy both the body and the soul. 13. They burden sober people with millions of paupers. 14. They cause immense expenditures to prevent crime. 15. They cost sober people immense sums in charity. 16. They burden the country with enormous crime. 17. Many moderate drinkers want the temptation removed. 18. Drunkards want the opportunity removed. 19. Sober people want the nuisance removed. 20. Tax-payers want the burden removed. 21. The prohibition would save thousands now falling. 22. The sale exposes our persons to insult. 23. The sale exposes our families to destruction. 24. The sale upholds the vicious and idle at the expense

of the industrious and virtuous. 25. The sale subjects the sober to great oppression. 26. It takes the sober man's earnings to support the drunkard. 27. It subjects numberless wives to untold sufferings. 28. It is contrary to the Bible. 29. It is contrary to common sense. 30. We have a right to rid ourselves of the burden.

[Now let us try to "argue" the other side of this question for the drinkers. "What's the use of being *sober* all the time? Ain't a man entitled to have a little 'spree' now and then? What does freedom mean, if not to drink what you want and when you want it? Isn't this a free country? Can't a feller do what he likes? Mayn't a man whip his own wife? And if he wants to git drunk, whose business is it? If I don't want to send my children to school, who can make me? It's nobody's business if I do keep them hungry and in rags. They are mine. And what are poor-houses and prisons for, if not to put people in? and what would be the use of a gallows, if not to hang murderers? I don't believe in these temperance fanatics. Licker and terbacker was made for us men and women to use. If not, what was it made for? I like the smell of a good Havana, and the taste of old Bourbon. Lager beer won't intoxicate, unless you drink too much of it, and then a feller feels funny. Its your poison stuff, with fusil oil that 'kills at forty rods.' And the Bible says something about its being 'good for the stomach's sake.' Then why not take a drop? I don't believe in this temperance business; they're all a mean, religious set. So I 'go in' for licker and terbacker.'"]

NEW YORK NAUTICAL SCHOOL, under the auspices of the Society for the Education and Advancement of Young Seamen, 92 Madison Street, New York, recently held its twenty-first anniversary, when the President, Dr. William F. Thoms, delivered the annual address. He was followed by Captain Frisbie, President of the Marine Temperance Society, Isaac T. Smith, President of the Metropolitan Savings Bank, Rev. Alva Wiswell, Dr. V. Morse, and by others.

The design of this society is to secure the moral and intellectual improvement of young seamen, thus providing our merchant marine with better educated and more reliable men, and our ships with intelligent American seamen, which objects are every way worthy the most liberal support. There should be just such schools in every American sea-port.

Department of Literature, Science, Education.

GENESIS OF GEOLOGY—No. 3.

THE ORIGIN OF COAL.

TO the forests of the carboniferous period is due the coal that blazes and crackles in our fire-places, filling with warmth and cheery comfort the palace and the cot; that drives great ships against wind and tide, and sends the iron horse shrieking and snorting across plains and over mountains—that engine of civilization at the sound of whose tread the savage denizen of the forest is startled, and before which, with instinctive dread, he flees to more distant wilds. As has been intimated, this was peculiarly an age of great vegetable growth, the earth groaned beneath the weight of life that came from its womb, and a universal tropical luxuriance prevailed. Upon hillside and plain, in valley and in swamp, nature evinced an unexampled floral prodigality. But this condition was not destined to continue, for this was an era of changes, and this beautiful landscape, this scene of vegetable magnificence, was transformed into a watery waste, the old ocean again claiming his empire. This vast mass of vegetable matter, together with the leaves and branches which had fallen off and accumulated upon the ground during the period, was buried beneath a bed of sand.

So far, long geologic eons, the continents rose, and upon them great forests grew, and were in turn submerged. That it was by oceanic deposits that the coal formations were covered is manifest from the nature of the superincumbent strata, and the fossils therein contained. Coal veins alternate with layers of sandstone, shale, conglomerate, and limestone, all the product of aqueous agency.

These formations are characterized by the presence of the remains of marine fauna. The great accumulation of vegetable growth buried beneath sedimentary deposits, hundreds of feet in thickness, being subjected to heat and pressure, experienced a chemical action resembling slow, smothered combustion. We may mention here that vegetable matter undergoing combustion in the open air loses in a great degree its carbon. Such, however, is not the case when the process goes on without the supply of air, the carbon being in a great measure retained, as is seen in the making of charcoal. This was the work of the long ages of the coal period, for countless centuries (geolo-

gists dare not be stinting of time) the great Cosmico chemical change went on; the oxygen and hydrogen passing slowly away, left a deposit of carbon in the form of coal beds. It not unfrequently occurs that we find formations in an incomplete state of development, that of *lignite*, a substance partially retaining its ligneous character, and in a state of semi-transition into coal. It is estimated that eight feet of vegetable matter are requisite to the formation of one foot of bituminous coal, and twelve for one of anthracite. Amazing thought! the time required to complete this work! how wonderful the development of the Creator's plan! Little by little, day by day, year by year, and age by age the work went on, and almost by insensible degrees, and by atoms, was the great aggregate obtained. To form a slight conception of the magnitude of the work of the coal age, we need but consider that the greatest tropical luxuriousness would not furnish in twelve hundred years vegetable matter sufficient to form a seam of coal six inches thick; also, that the rankest vegetation of the present day consumes but fifty tons of carbon per acre, whereas if fifty tons of anthracite coal were spread out evenly over an acre, its thickness would be less than one-third of an inch. In view of this it is needless to refer the reader to the larger seams of coal, but let us take the smallest that can be worked, three feet in thickness, and for a moment contemplate the length of time required for its formation. The reflection causes the age of the Pyramids to sink into insignificance, and the nations which we are wont to deem ancient seem not to have reached their juvenility ere they vanished. How lavish of time is nature in consuming 7,200 years in the formation of a seam of coal three feet in thickness, and 72,000 years in developing a coal basin whose aggregate thickness is thirty feet. The time involved in this work is amazing, but when we consider, and add to it, the period of submergence, and the time occupied in the accumulation of shales and limestone, the length of the age will be doubled.

COAL GEOGRAPHICALLY.

The geography of the coal age was varied indeed. At one time the east coast line was

not far inside the coast of Nova Scotia and New England, the southern border extending through North Carolina, Georgia, Alabama, and Mississippi; around Arkansas, touching Northern Texas, running north, bounding a sea, covering the Rocky Mountain region.

At another period, the wide fields we have named lay beneath the great sea, and the coast line ran through Southern New England, Southern New York, north-west around Michigan and south to Northern Illinois; thence west and north-west to the upper Missouri region.

Thus we leave the coal age, so full of geologic interest, so freighted with import to humanity, and in taking leave of this branch of our study, we recall, with feelings akin to devotion, and with emotions of deepest admiration, the scenes through which we have passed, landscapes rendered beautiful by the gorgeous display of tropical profusion, alternating with upheavals and vast inundations, together with the grand operations of vital and physical force that characterized it.

THE PERMIAN AGE

is here the great period of disturbance and convulsion. It was the mountain-making epoch, during which the continents were heaved and torn from their beds, and the ocean wafted, as it were, by the breath of the Almighty, from its place. Instead of a sand-reef, the Appalachian chain now forms the eastern border of the continent. As a result of the powerful agencies at work, the strata were not only uplifted, but flexed and folded, giving rise to all forms of distortion. This was also the period of metamorphic action; the internal fires so long pent up now burst their prison doors, and through their agency the rocks were crystallized. It was then the bituminous coal was converted into anthracite, sandstone and shale into granite, and limestone into statuary marble. Eastern Pennsylvania was especially the scene of this great metamorphic disturbance, as a result of which are to be seen those mountains of coal which so enrich the Keystone State. It was during the Permian that most of the rich metallic veins were formed, in some cases the metamorphosis developed lead, gold, copper, etc., and in others topazes and diamonds.

There is a peculiarity of position of the Permian strata that invites notice. Frequently they are flexed and folded, a condition evidently due to lateral pressure and internal heat. It is evident that the direction of the force was from the Atlantic side of the Appalachian

chain; it was also steady and long continued, not paroxysmal, there being no obliteration or destruction of the order of stratification, which would have been the result of sudden volcanic action.

The close of ancient geologic days is at hand, and the dawn of the middle ages draws nigh. From the far-off time when matter first leaped into being, we came to the time when our planet was a gaseous orb, then a fiery meteor flying through space, and we beheld it pass into the fluid state, thence to the solid. The fiery ordeal over, we beheld the gorgeous and terrible scenes of the stormy age, after which Ocean held a universal scepter over the earth; and, when ages had been passed in the exercise of the physical force, a higher evolution took place, and life began. We followed its progress from the lowest algæ upward, until the animal was brought upon the sphere, beginning with the lowest radiates, moluscs and articulates, rising higher and higher in the scale until great monsters, formidable fishes and reptiles, people the waters; and thus through varied scenes of tempest and conflagration, storm and rains, volcanoes and earthquakes, convulsions and inundations, we are brought to the age which we have just studied, glean- ing at every step important truths and lessons, all pointing to a great Intelligence, whose laws govern the whole.

The ancient history of the earth is full of beauty and interest, more attractive than the history of Rome in her greatness; and the ruins of the Paleozoic earth far excel in grandeur and magnificence the temples and tombs of Egypt, and in ages to come will afford themes for study, and excite the admiration and wonder of intelligent creatures, when those splendid memorials of man's greatness shall have crumbled into dust.

ULYSSES L. HUYETTE, M.D.

SINCERE WORK.—We speak of sincere work. It means that no poverty of material or weak joint is covered up with a fair outside. Forty years ago a Bowdoin professor lost a screw from the fine theodolite he thought handsomer than any woman in the town of Brunswick. The missing little fastening was a great defect much deplored; but an ingenious student undertook to supply it by making another screw out of brass, obtaining from sulphate of iron his own oxide to polish it. His success led him next to construct a perfect steam-engine on a small scale; and that education of the brain by

the hand induced more mechanical and chemical study, on the strength of which, being a missionary in Constantinople during the Crimean war, he set up vast bakeries for the pressing need, turning out seven tons of bread a day, to save life and health for hundreds of thousands, specimens of which, filling the air with their perfume from the decks of several of the vessels, led a Mr. Robert to inquire for the baker, an introduction to whom occasioned the founding, for a blessing to the whole East, of

Robert College, sending rays of liberty and religion to the Oriental dark — all from the good heart that was put into the turning of a screw! The sincere boy is now the sincere man, Cyrus Hamlin.—*Dr. Bartol.*

[Every boy should learn to use tools—should learn a trade. Again we advise parents to procure for their children a chest of tools, with which to learn their use, and, at the same time, *develop their faculties.* This is one way to make inventors. Try it. Good will come of it.

SIR RODERICK MURCHISON,

THE EMINENT GEOLOGIST.

WHEN the Royal College still had its quarters in the picturesque town of Great Marlow, on the banks of the Thames, a young Scotchman named Roderick Murchison was among the cadets preparing for a military career. He was a descendant of one of those Highland families who figure with belligerent characteristics in the troubled history of Scotland, and who finally lost both blood and treasure in defending the cause of the Stuarts. Though the grandfather and great grandfather had fought their best against George I. and II., yet their descendant never forgot the honor he felt in carrying the colors of George III. in the battles of the Peninsular; and he became in later life a pretty thorough Englishman, losing even the accent of his native country.

In 1808, when young Murchison was only sixteen, he obtained his commission, serving in the 36th Foot, with the army of Spain and Portugal, under Lord Wellington. He was appointed to serve on the staff of his uncle, Sir Alexander Mackenzie, in Sicily, and finally attained the rank of captain in the 6th Dragoons. He carried the colors of his regiment at the battle of Vimiera. After the peace of 1815, Mr. Murchison left the army and married the daughter of General Hugonin. Instead of passing their time in fashionable idleness, the young couple turned their attention to the study of the physical sciences. Mrs. Murchison was already a very good conchologist, and meeting Sir Humphry Davy in a country house, his conversation directed her husband's attention to geology.

In 1825 we hear of Mr. Murchison becom-

ing a member of the Geological Society, and soon after we find that he is launched on an independent course of experiment and inquiry. From this date his work as an original observer may be said to have commenced. In the same year his first paper appeared; it was "Some Remarks on the Geological Formation of the Southern Counties of England," and was published in the "Transactions" of the Geological Society.

Early in his career we find him working in Southerlandshire; he examined the coal strata, and proved that it was a member of the Oolitic series. He then concluded that the primary sandstone of McCulloch was one and the same with the "Devonian," as the old red sandstone is also called.

In 1828 Murchison made a complete examination of the extinct volcanoes of Auvergne. These remarkable hills assume the form of natural citadels, placed amid an inextricable labyrinth of gorges and ravines.

Attracted by the numerous fossil remains that were reported to be found in the quarries of Elhningen, at Stein, near Lake Constance, the geologist and his wife went there. During their sojourn in the neighborhood they were rewarded by finding a perfect fossil skeleton. Mrs. Murchison, who was an excellent draughtswoman, made so careful and accurate a sketch of the fossil relic, that Cuvier, to whom the drawing was sent, was enabled to characterize the animal, and the celebrated "fossil fox" is now in the British Museum.

Murchison and Brewster were foremost in helping to establish the British Association for the Advancement of Science, and it was

at their first annual meeting in 1831 that the former laid before the Association his ideas of the distinctive divisions of English geology. In the preface to the last edition of "Siluria," the author says: "The term 'Silurian,' when first applied by me in 1835, (and in my large work entitled the 'Silurian System,' completed in 1838), was intended to characterize a great natural system of ancient deposit, which had not before been classified, and the type of which was found to be ex-

and the Volga, for many leagues. The mere names of these places may give some idea of the vast extent of Murchison's explorations.

The importance of these investigations was at once patent to the Emperor Nicholas, who invited Mr. Murchison to superintend a geological survey of Russia, in connection with some other scientific men. In 1842 Mr. Murchison traveled through parts of Germany, visiting the Carpathian Mountains, and two



hibited in Siluria, or the country of Caractacus and the old Britons known as Silures."

In the year 1840 M. de Verneuil, the great French paleontologist, proposed to Mr. Murchison that they should go together on a scientific tour in Russia, the geology of which country was almost unknown. Murchison consented, and those savans explored an extensive region, including Archangel, the shores of the White Sea, besides tracing the banks of the rivers Volkoff, Siaso, Dwina

years later he explored the Paleozoic formations of Sweden and Norway.

In 1845 Mr. Murchison published his great work on the "Geology of Russia and the Ural Mountains," which he had completed in conjunction with M. de Verneuil and Count Keyserling. In consequence of this splendid contribution to science, the Emperor Nicholas conferred upon him several Russian orders, besides various magnificent presents. Soon after the publication of the work on

Russia, Mr. Murchison received the honor of knighthood from Queen Victoria, and in 1866 was made a baronet.

In 1844, after his return from exploring the auriferous Ural Mountains, Sir Roderick was shown some specimens of Australian rocks, collected from the eastern chain of that country by Count Strzelecki. On examining these he was immediately struck by their similarity to the Ural Mountains, and was deeply impressed with the belief in their auriferous character, although no gold had yet been found there. In anticipation he called this range the "Cordillera." He memorialized the government, and did all in his power to direct attention to the subject, yet nothing was done till some years later, when a purely accidental discovery of gold in Australia proved the truth of his deductions.

Speaking of the quality of his mind, a distinguished associate of Sir Roderick once said, that his power of geological surveying at sight almost amounted to intuition. During his long walks over a district (when, by the way, he generally tired out even the younger men of the party), it was his habit to get on some elevated spot, and survey the position of the rocks, as a general might his troops at a review.

Since 1830, when Murchison and a few others formed themselves into a Society of Geographers, that sister science had attracted his attention. The society grew in importance, and he devoted much of his time to the furtherance of geographical explorations. His position as frequent President of the Society brought him into connection with most of the great travelers, Sir John Franklin and Dr. Livingstone among the rest; his devoted friendship, and his unceasing efforts to serve these two great men are well known to the public. In a letter to the writer in 1856, Sir Roderick says, "I have been striving hard to serve poor Lady Franklin, and to promote an object which all the Arctic officers have in view, and at heart. But is hopeless to obtain this definite amount of search for the wrecks of the Erebus and Terror so long as the *Times* is dead against us."

The portrait exhibits a strong head in every sense of the word, temperamentally knotty, tough, enduring, organically staunch, positive, persevering, confident. Rarely does

even the exploring itinerent scientist possess such qualities for the purposes of his chosen vocation as we find in the anterior or intellectual department of Sir Roderick's head. The whole bearing of it is toward acquiring knowledge. The nose, the eyes, the attitude evince scrutiny, investigation—a curiosity of a high and cultured order, but nevertheless a strong and yearning curiosity. The profile of the head is certainly fine, evidencing a nature robust in moral virtues and warm in social aptitudes. An enthusiastic scientist, he never lost sight of the claim of duty, morality, and social order. Friendship is very conspicuous in the configuration of the portrait before us, and his disposition must have abounded in that most genial, conservative element of human nature. An executive nature like this could not but respond to the stimuli of feeling and kindness. He was no scoffing, skeptical scientist, else the development of the moral and spiritual region of the brain is not properly represented to us. A soundly practical man, he was doubtless most hearty and direct in statement as in action. Although an author of authority, his writings were only the abstracts of actual performances. Actions with him spoke more than volumes.

"RESPECTFULLY DECLINED."

BY GLEN CAROL.

RESPECTFULLY declined, Dick's very polite invitation to take "just one glass," though 'tis only sherry—light wine, he calls it. But I see within the sparkling depths of the goblet he holds for my acceptance a band of specters that point and beckon and fling their shadowy arms aloft; I hear their fearful shrieks, their cries of remorse, and their names are stamped upon each ghastly brow. Woe, want, and wretchedness are here, with theft and murder, and a hundred other phantoms of evil appear and reappear beneath the rosy waves.

No, no, Dick! How dare I risk all this? Your invitation is still "respectfully declined."

Respectfully declined, any association with those men who spend their evenings away from home; who are found night after night

at the club, or theater, or in billiard-halls, wasting, *murdering* time; who spend the earnings of the day in the follies and crimes of the night; who scoff at this world's good, and smile upon its worst; who are found in the "Gold Room"—the significant title of many gambling-halls—and who, with every turn of the painted cards, or buzz of the faro-wheel, deal out to themselves poverty, ruin, and disgrace—who barter conscience and self-respect for *a dream of gold*!

Respectfully declined, the society of those persons from whom I can learn nothing; in whose companionship is found neither pleasure nor profit; who ask no higher theme of conversation than their neighbors' shortcomings; who take their tea with gossip instead

of sugar, and who couldn't tell you whether the French Revolution occurred before or after the Flood; who are unable to sleep nights until fashion has stated definitely what costumes are, and are not, to be worn during the coming winter, and who fritter away long hours, hacking and tacking scraps of silk and velvet, destined eventually to form a "log-cabin" spread, or some other abomination.

Respectfully declined, all the ills and torments of this life—but these, we fear, in vain. Upon many a worthless manuscript must we trace our seeming favor with unwilling pen. The lot which falls to each and every mortal, be it glad or sad, must be stamped with fate's relentless seal, "Accepted!"

BOURBON REVIVAL IN EUROPE.

EVERY great struggle of nations is dramatic. Croly was vividly conscious of this when, at the fall of the first Napoleon, he declared that "the great drama of Europe is concluded." Shakspeare, who could apply tragedy to the half-fictions of Macbeth and Richard III., and found such abundant scope for his artistic powers in the wars of the princes of the rival Henry of York and Lancaster, would be at home with the dynasty which planted itself on the thrones of France, Spain and the two Sicilies, and interwove its branches with the imperial and royal houses of Austria, Great Britain, and Italy. Beginning with the royal lovers, the Constable of Bourbon and the "pearl of pearls," Marguerite of Valois, baptized on the night of St. Bartholomew, cradled in the civil wars of France, confirmed by Sixtus V. when Henry of Navarre became the "Most Christian Majesty," having Sully, Richelieu, Mazarin, and Colbert for its statesmen, and the diversified events of the reigns of the Grand Monarch, the Well-Beloved, and his three regal grandsons, Louis XVI., Louis XVIII. and Charles X., to furnish material for scenes, many of them tragic enough, goodness knows, and others as broadly comic and farcical—besides the side-shows of the successors of Philip V. in Spain and Naples—the dramatist would find material ready prepared for him as abundant as any in history.

The nineteenth century has as yet afforded no tragedy like that of 1793; but the discovering of so many Bourbons by Napoleon I., and their pitiable helplessness, the restoration by the combined military power of Europe, to be again dethroned one by one by the peoples whom they impotently sought to rob under the *régime* of former centuries, and the present conspiracy to reinstate them once more, are eventful enough to deserve attention.

It had been fondly hoped by many publicists that Bourbonism had become obsolete; and whatever the future might have in store, the dynasty that "forgets nothing and learns nothing," that "never has mistakes to rectify," would not again become prominent in European politics. The Bombina had become an exile, and Donna Isabella II. compelled to seek protection from the nephew of the man who had once wrested from her father his crown. France had weighed both the elder and the younger dynasties in the balance and found them wanting. Meanwhile, all Europe had made a long step forward. Parliaments met at stated periods in the German and Austro-Hungarian Empires, the kingdoms of Italy, Denmark and minor sovereignties of Europe. "Pieces of paper come between every ruler and his people," except in Russia, and even there serfdom is at an end, and communal government is becoming

ing stronger. The German Empire, Hungary, and Italy have all engaged in the work of popular education; Minister Deak himself declaring the purpose of establishing in the kingdom of Hungary a system like the common schools of the United States. The idea of nationality, in which sovereigns, nobles, and citizens are all participant, inspires the people and affords good ground for hope that the days of despotism are numbered. Even the infant republic of Spain has entertained like dreams of enfranchisement of the intellect, the end of the reign of darkness, and the extension of free government. But the facility with which men change in France confounds calculations. Under the name of a Republic, the men at the head of affairs are shaping their policy so as to compel the restoration of the Bourbon kings.

It is evident that the supporters of arbitrary government in Europe have engaged in a common conspiracy against free institutions. At the present time France and Spain are the objective points. Hence we are informed that the Cabinets of Berlin and Vienna have agreed to exercise no influence in the decision in France, whether in favor of a republic, empire, or monarchy. Meanwhile they scrupulously abstain from any acknowledgement of the Republic of Spain. The Prussian Court, even, following its old robber traditions of making war for the sake of pecuniary profit, talks of indemnity for two Spanish ships captured by Captain Werner at Carthage. Austria is principally employed with the Count de Chambord, who claims the title of Henry V. of France, famous alike for his unlikeness to Henry Quatre the first of the Bourbon kings, and for being the son of the Duchess de Berri, whose exploitation in his behalf forty years ago terminated in a most laughable fiasco. As his ablest champion, Prince Esterhazy, has committed suicide, it is very probable that the Count must depend upon Frenchmen alone to betray the French Republic.

The crisis of the 24th of May of last year displaced the Republican Ministry, and gave the government over to Marshal MacMahon, who seems directed in his administration by the purpose of restoring the monarchy. Such a part is no novelty in French politics.

Talleyrand, while in the Cabinet of the elder Napoleon, notoriously intrigued in favor of Louis XVIII., and entered his service. MacMahon but imitates. He received his commission and ducal investiture from the late Emperor, whose party and dynasty he has compromised and forsaken.

But it is noteworthy that the administration now in power have not the hardihood to appeal to the French nation. Whenever there occur vacancies in the National Assembly there are no elections called to fill them. Under the rule of M. Thiers elections were always called in such cases, and the fact was a very significant one that Red, and not moderate republicans, and never royalists or imperialists, were usually chosen. The present government, with all its fray—Legitimists, Orleanists and Bonapartists—have never had but twenty-seven majority, and dread, naturally enough, any risk of frittering it away by elections of new members. It strives to perform its part by indirection.

Meanwhile the Duke de Broglie, the premier of the MacMahon government, has been assiduously employed in preparing the way for the contemplated Return. He has delivered addresses at public dinners eulogizing the President, asserting the irretrievable downfall of M. Thiers, and declaring that a republican government is incompatible with the prosperity and constitution of the French people. He is studious, however, to refrain from naming any ulterior purpose, but chiefly to extol the talents and good qualities of his Chief. But there need be no disguise suspected. Marshal MacMahon is no Cromwell, but is watching the opportunity to become a General Monk.

A letter of the Duke de Broglie was sometime ago published, setting forth the view of the field. It argued that the French nation would be most prosperous with a king; but confessed that for the present "the prejudice against the ancient monarchy" was insurmountable. He declared against universal suffrage, which he admitted would result in a republican majority; yet asserted that when the National Assembly styled the government a Republic, it affirmed a fiction; that the present government was not a Republic, but a provisional arrangement, to continue till permanent institutions could be

established. There seems to be something equivocal about all these voluble statements. While the "prejudices" of the French people are alluded to as invincible, there has been intrigues going on between the Orleans and Legitimist factions, and certain of the latter have offered the crown to the Count de Chambord, the grandson of Charles X., by whom it was accepted, but who, not long since, acted the part of the "bull in a china-shop," by publishing an ill-advised letter, and thus smashing his chances for the throne. Reports are current that MacMahon will promote measures toward re-establishing the ancient dynasty. The assertion of De Broglie that a republican government in France is always characterized by proletarian excesses, from the Reign of Terror of Robespierre to the Commune of Paris, is designed to impress the Bourgeoise and other classes with apprehension of the repetition of former scenes of violence, and to profit by their alarm.

Simultaneously there has been a demonstration for the resting of the Bourbon dynasty in Spain. There are in this instance, as in France, two royal branches, the Carlist and the Alfonsist, but they have not united. Under the auspices of the Broglie government, as there is just reason to suppose, Don Carlos has been carrying on a half-guerrilla warfare in the provinces of Navarre, Biscay, and Catalonia. The propositions in the Cortes in June to confer extraordinary powers on the Ministry in resisting him was met by a protest on the part of the minority and a threat to abandon their seats. About the same time a strike of the workingmen throughout the Peninsula had been ordered by the Internationalist leaders in London. This was followed by conflict with the civil authorities at Alcoy; and there being concert of action, a general insurrection of the *Intransigentes* broke out. Juntas were established by them in numerous towns, and a system of government by cantons on the communal or Switzer plan was proclaimed. The old jealousy of the cities against Madrid seems to have operated to aid the uprising.

We do not care to discuss the purposes of the workingmen, for in a contract between them and the capitalists our sympathies have always been on their side. But when anar-

chy is proclaimed, and the negative of all authority, as the means to accomplish purposes, we confess to some old prejudices against mob law and populace rule, which remains yet to be conquered. We love the idea of individual sovereignty, but not when any one person virtually assumes to be *the* individual. We are opposed to despotism, to the dominion of classes, cliques, caucuses, or monopolies; and would let everybody have an equal chance in the social or civil polity. But to subject the frugal and orderly to the domination of the lawless and shiftless, whatever the pretext, would not be any improvement upon the present arrangements. Let liberty be ample, but without license to encroach.

There are many persons, naturally restless and ambitious, who are willing to destroy whenever they are not themselves in the ascendant. If the professed supporters of communal and cantonal government in Spain are of that character, they have feeble claims to the sympathy or respect of the friends of popular freedom. Indeed, like Robert Brown, the old Puritan, and other radicals, they would find it easy to enter the very order which they had opposed, and build again where they had destroyed.

Spain is in her crisis of trial. The purest, most earnest and eloquent advocate of free government, the most zealous believer in the people, is now at the head of affairs, vested with extraordinary powers. He has, like Lincoln in 1862, changed the policy with which the war had been prosecuted, and with it the generals. The sympathizers with republican institutions are warmly in his behalf. He is golden in eloquence, and appears to be a man of action. It is hard, however, to believe in the Spanish people. Celtic and mongrel races do not seem to affect the popular government; and the idea of representative administration hardly appears to us to have impressed the Spanish mind. If it can be burned in, Emilio Castelar is the man to do it. He is the hope of Spain. Let us, if we can, indulge for a little while the fancy that he is no "broken reed." Some men embody in themselves the potencies of an age. Socrates was more than the Mysteries of Eleusis, Plato than a generation of philosophers, Swedenborg than a Europe full of ac-

* ademicians. Perhaps Castelar is the power of all Spain.

They had Bourbons, likewise, in Italy. A worse plague, too, than murrain. Bomba, and then Bombina—when strong enough, they would oppress; they knew of subjects only as the slaves of princes. So Italy revolted. Mazzini, a man full of brave ideas, endeavored to give a republic to Rome, but was beaten down by cannon sent from France and manned by soldiers of the Prince-President. The programme was changed, and Cavour next tried his hand at uniting Italy. The Austrian was expelled from Modena, Parma, and Lombardy; then the Bourbon from Naples. Law succeeded to brigandage, which for two thousand years and more had ruled all the way from Piedmont, the foot of the mountain to the toe of the boot. Public schools were introduced. The school-master drives out the despots.

Whether will be realized the idea of Napoleon, that Europe will become all republican, is yet uncertain. Twenty-five years ago it appeared more probable. In the language of Castelar, "it passes like a meteor over all the horizons. It reigned some months in Italy, a month in Vienna, a month and a half in Frankfort, a year in France, some time in Spain. Suddenly it disappeared like a sanguinary comet, not overthrown by enemies, but destroyed by its passions, by its errors, by its intemperance, and, above all, by its insensate revolutions against itself. We have much of prophecy and little of politics. We know much of the ideal; little by experience. The republican party should be the party of our idea yesterday, but the party of action to-day; instead, all that we advocate is realized by conservatives. A republican, Kossuth, sustained the autocracy of Hungary; a conservative, Deak, realized it. Hertzen, a republican, advocated the emancipation of the serfs; the Emperor Alexander realized it. Mazzini proclaimed the unity of Italy; it was realized by Cavour. The republicans of Frankfort sustained the unity of Germany, but it was realized by the imperialist and Caesarist, Bismarck. Who aroused the republican idea in France, where it had been three times stifled—because the first republic was a tempest; the second, a dream; the third, nothing more than a name—who aroused it?

Victor Hugo, the poet; Jules Favre, the orator; and Gambetta, another orator not less illustrious. Who candidated it? A conservative—Thiers." A sad confusion this of the incapableness of republicans, that they can only enunciate great ideas, but are too impracticable to render them into institutions. But it proves not the hopelessness of republicanism. What though Victor Emanuel rules united Italy, Deak gives law in Hungary, and Bismarck has combined the hundred-headed Germany into a single empire. They have brought free institutions more near to the grasp. With the incubus of the old education thrown aside, a new power will be communicated to the people.

We trust that Castelar is correct in his predictions: "The French Republic can never be conquered by the monarchical coalition in the Versailles Assembly, nor destroyed by the word of the man who presides over it to-day, the general of the Cæsars. I do not believe in the possibility of a Carlist restoration. It is not possible that Spain should raise again the Inquisition over the conscience, the censorship over thought, silence over the tribune, the gag over the press, the convent of idleness over the workshop of labor." The deliverance of that country from the continual revolt and the Carlist invasion will be Castelar's best initiation as a statesman, a prophet of the modern time. Old Spain is old Rome; and the endeavor of Don Carlos is like resuscitating the claims of a Tiberius or a Nero. The mode of his warfare illustrates the madness that characterizes Bourbonism. He invades every home to dishonor every family. When he occupies a town he destroys the marriage records, thus embarrassing the proofs of title to property, casting upon the marriage alliance the odium of concubinage and on every birth the stigma of illegitimacy. Such is the entertainment which is prepared for Spain; such is the honor offered by MacMahon to France; such the future prepared for Italy. No wonder that Castelar avows that before consenting to Don Carlos it would be better to plunge Spain into the ocean.

The Bourbon is like the Old Man of the Sea. Once astride of a nation, there is little left for it worth hoping for. France was emasculated, and Spain, from being foremost

among the nations of Europe, became the very hindmost—a libel on modern civilization, and a reproach to the Christian name. Sensuality ruled in the court, and robbers were predominant in the mountains. Despotism, barbarity, and extortion characterized the government. Let us hope that no such restoration of Middle Age barbarism

may occur anywhere in Christendom. Lamaism and Brahmanism may be accepted in Asia, but for Europe and the Aryan race something better is required. The contest now in progress is for the dearest rights of human nature; and in it we must believe that Liberty will succeed, even though every treason in Europe be arrayed for the better.

ALEXANDER WILDER.

ENGLISH LITERATURE.*

BURNS longed that the gods “the giftie gie us, to see oursels as ithers see us;” in a literary point of view our English cousins have now that inestimable privilege. Taine has, perhaps, not exactly held “the mirror up to nature,” yet to such a painted image of nature that the features and position are easily recognized if the exact likeness is not reproduced.

There is nothing more narrowing and provincializing to a nation or to an individual than constant viewing oneself by the light of one’s national or one’s family opinion. The thought of a nation or a period has always a tendency to run in grooves. To get out of the ruts of cotemporary thought is always a step in advance; this step in advance the English-speaking and reading public may take if they choose to read the great Frenchman’s pages; for, however determined they may be to resist the fascination of his style and thought, they can not fail to be influenced, in a degree, by his judgments. And all who are not trammelled by national prejudice must, for the most part, coincide with the author’s estimate of English writers.

One may read every other work upon English literature in the language, may study all the critiques upon each individual writer, and yet, if he has not read this work, there will be a vast gap in his true knowledge of the subject. Everywhere we are surprised and delighted by the opening up of new vistas of thought, new views of old and well-known grounds, which make them better known to us.

Yet there is an exaggeration, an excess of epithet, a flame and glitter of imagination that fires the reader, and sometimes dims the judgment; this will be readily seen if one turns from the pages of Taine to the pages of Plato; the contrast is as the tropic exuberance of fo-

liage and color to the calm tints of an English landscape—it is as if one had passed from the conflict of earthly passions into the immortal calmness of the gods.

Again, while Taine constantly deprecates the English lack of delicacy, and use of coarse expressions and invectives, he uses equally as coarse and rough words when remarking upon their faults; hence one must beware of blindly coinciding in all his opinions, or of taking him as the perfect pattern of a critic.

Our author starts out with the idea of finding behind all theories, acts, and writings, the individual, the man as he lived, moved, thought, in his own day, and of judging him rather by the opinions of his own times than by the opinions of our day; this is fair and philosophical, but extremely difficult; and, in any degree, to accomplish such an undertaking, it is first necessary to divest oneself of prejudice, prepossessions, and nationality. This, Taine does not always accomplish; his own personality appears; we know him a Frenchman, we sometimes find the partisan; but he is an ardent student of causes, and never purposely unfair.

The “History” opens with a description of the wild, frozen islands of Jutland, and the wild, fierce men, Saxons, Angles, and Jutes, who, far back in the misty fifth century, came like a herd of wild beasts and took possession of green England. The gradual change of these pirate barbarians to milder manners and a better culture is then depicted, and instead of the stereotyped history of literature where we have each individual painted and framed by itself, solitary, stripped of all surroundings, we have great, historic paintings, showing the dress, climate, and productions, and thus illustrating the influences of the day that formed the writer and, reflexly, the writer’s influence upon his countrymen and succeeding times. All the greatest English authors, from early days to Dickens and Thackeray, are depicted,

* “History of English Literature.” By H. A. Taine. Published by Holt & Co., New York. “Outlines of German Literature.” Holt & Co.

surrounded by the men and women of their day, acting their part in the drama of life, and not as mere automata, transcribing for us the titles of their books, and labeling specimen skeletons of their characters. Students of English literature must read Taine, and that the work might be brought within the leisure and means of ordinary students, the volumes have been judiciously abridged by John Fiske, librarian of Harvard.

Since the German nation has taken so prominent a place among European powers, the study of the German language and literature has received a new impetus. To those who

have not time or opportunity to acquire the language, and who yet desire a knowledge of German thinkers and German thought, Gostwick and Harrison's *Outlines of German Literature* will be a valuable acquisition. In a moderate compass it furnishes clear, concise views of all the prominent writers who have lived since about the year 380. For a book of reference this work will be found very serviceable, as names and dates are plainly given; the style is pleasing and expressive, and is an "outline" of the subject; the general reader or casual student will find the work satisfactory.

AMELIE V. PETIT.

PEN AND INK PICTURES OF IRISH CUSTOMS

WAKES.

MANY changes have, within the past century, taken place in Ireland. There is no longer a Parliament sitting in College Green; the Established Church is a thing of the past; the grievances under which the tenant farmers groaned have been partially redressed; and the peasantry now receive a rate of wages that enables them to live in a condition of comparative comfort. No change has, however, taken place in the customs of the Irish people. When a child is born, the happy father gives a "blithe-meat," as it is called, and the neighbors are invited to a "tea," with its necessary concomitants. This feasting is followed by a distribution of whisky-punch; and a jolly scene is sure to follow. Pat Murphy lilts off Tom Moore's silly song:

"Whisky, drink divine!
Why should drivelers bore us,
With the praise of wine,
When we've thee before us?"

Mary Moriarty follows with her favorite:

"A sailor courted a farmer's daughter,
That lived *convanient* to the Isle of Man."

Peter Purcell responds to the unanimous call to tell his story, "The Rising in '98," and then there are calls for his laughter-exciting tale, "How Denny Flannigan Tricked the Guager." Songs and stories alternate, and it is sometimes near the hour "when graveyards yawn," when the noisy revelers retire. All this time the weak and suffering mother seems to be forgotten, and she frequently "gets a back-set," as it is phrased, or brain-

fever ensues from such senseless merriment. It is, however, the custom, and do you think Cor. Carleton would be so "mane" as not to do as the Carletons had done for generations?

When death enters a family, there is the inevitable "wake," with pipes and tobacco, and whisky galore. The boys and girls, for miles round, come to the "wake-house," and a good deal of love-making goes on, even in the room with the corpse. The pipes are not allowed to be idle, and the atmosphere is soon laden with the sickening tobacco fumes. Tea is made for those who have come any distance, and all are regaled with "a drop of the native." Very often this whisky is horrible stuff, and those who imbibe it soon become reckless and disorderly.

There is a story told of an Irishman who went into a public house, in Glasgow, and asked for "two glasses of the best fighting whisky." He, it is said, drank the stuff and was pugilistically inclined instantaneously. In Ireland feuds between families frequently exist, and when the Donegans and the Dempseys come in contact at the "wake," under the influence of the "native," no man can predict what will happen. Fights have frequently occurred. All night the "wake" is kept up; songs are droned, and stories are told; dancing, even in the presence of death, is sometimes to be seen, and disgraceful scenes of drunkenness are witnessed. Not very long since, Dublin was startled by the announcement that at a "wake" in the city,

so drunk were the friends of the dead that they did not observe that a candle had fallen upon the straw bed. A fire was the consequence, and the corpse was frightfully charred.

The Roman Catholic bishops and priests have prohibited "wakes," but the custom is still observed. An Irishman regards it as a point of honor to give his relatives what is called a "respectable wake," and the more whisky and tobacco consumed, the more respectable it is considered in the eyes of his foolish neighbors. "Hadn't Jamie Duffy a grand wake! Troth, and it's himself *deserved* it, for he was a decent fellow, out and out." Indeed, the provision for a "wake," in the shape of tea, whisky, tobacco, etc., is generally in proportion to the regard held for the departed when they were alive. Many a son plunges himself into debt in order thus to do fitting honor to his father, and fathers—aye, and widowed mothers, too—do the same when a child dies. Is not this both foolish and sinful? The "wake" is sometimes kept up for three or four nights, and the expense resulting therefrom is a serious matter to many. Then, at the funeral, whisky is copiously distributed. All coming into the house are treated, and three or four men are each supplied with a bottle full of whisky and a glass. With these they go out to the various pathways leading to the house of mourning, and all coming to attend the funeral are compelled to "bolt" one or two glasses of raw liquor.

Now and again, this custom—which surely would be "more honored in the breach than in the observance"—has led to much that was painful. How shocking to see four men carrying a coffin through a graveyard, and to see by their gait that they have been "putting an enemy into their mouth to steal away" their power of steady motion. Some years ago, at a funeral in the south of Ireland, the procession had to cross a narrow bridge of timber, and so inebriated were the bearers that the coffin fell into the river, and was got out with some difficulty. Thank God some improvement in the mode of conducting "wakes" and funerals is observable in Ireland; and I hope the day is not far distant when such unholy customs shall be abolished.

Of course, in religious families, "wakes"

are conducted after a widely different fashion. In the early hours of the night chapters from THE BOOK are read, hymns are sung, and prayer is frequently offered. About midnight the visitors leave, and only particular friends remain all night. Before the funeral, a suitable address is delivered by a minister, who also conducts a service at the grave. The Roman Catholics carry the remains into a chapel, where mass is said, and afterward a collection is made to raise a sum to pay for further masses for the repose of the soul of the departed. Often large sums are subscribed on these occasions, and Protestants frequently contribute handsomely—out of respect for a departed friend, or, mayhap, that their liberality may be extolled far and near. "Boys, did you hear how gamely Tom Johnston acted at Denis Dolan's funeral? If he didn't give two sovereigns, my name's not Johnny Rafferty. Ah, he comes of a good stock! God bless him! 'Deed if all the *Prodestants* was like him, I might turn my coat some day. If coorse, you know it's fun I'm making, boys, for I'll live and die in the true Church—the holy Roman." In this way Tom Johnston's subscription is talked of, and he becomes a popular man in the neighborhood. Some men are "wise in their generation." In my next I propose glancing at other customs which have still an existence in the old land.

CHRISTY CRAYON.

OUR CLASS OF 1873.

OUR Course of Instruction in Practical Phrenology opened its session for the year on the 5th of last November. The class was very respectable in point of numbers, talent, and intelligence. Every section of the country was represented, and each member evinced commendable diligence and an appreciative interest in all the subjects of instruction. We have confident hope that the world will be set forward in a knowledge of human character and duty by the influence which this class will be likely to extend throughout the country. One clergyman and one physician were in attendance—a fact significant of the growing inquiry on the subject of mental philosophy among the teachers of mankind.

As at the present writing the class is still in progress, we shall have something more to say of it in future numbers.

TEETH SET ON EDGE.—All acid foods, drinks, medicines, and tooth-washes and powders are very injurious to the teeth. If a tooth is put in cider, vinegar, lemon-juice or tartaric acid, in a few hours the enamel will be completely destroyed, so that it can be removed by the finger-nail as if it were chalk. Most people have experienced what is commonly called teeth set on edge. The explanation of it is, the acid of the fruit that has been eaten has so far softened the enamel of the tooth that the least pressure is felt by the exceedingly small nerves which pervade the thin membrane connecting the enamel and the bony part of the tooth. Such an effect can not be produced without injuring the enamel. True, it will become hard again, when the acid has been removed by the fluids of the mouth, just as an egg-shell that has been softened in this way becomes hard again by being put in the water. When the effect of sour fruit on the teeth subsides, they feel as well as ever, but they are not as well. And the oftener it is repeated, the sooner the disastrous consequences will be manifested.

CHARACTER FROM PHOTOGRAPHS.—Perhaps

one of the best tests of the truth of Phrenology is the examination of likenesses, and the description of character deduced from them. If the likenesses are properly taken for the purpose, we undertake to write out character in full in that way. A gentleman recently sent likenesses of himself and his wife, requesting "a plain, unvarnished tale" respecting them, and a short time after receiving the documents, he sent us the following:

"DEAR SIR: I received the written description of myself and of my wife, and all to whom I have shown them pronounce them 'true to the life.' It is wonderful how well and truthfully you can read character from photographs. Those who are opposed to the science have to strike their colors, and acknowledge that it is beyond their 'ken;' and I, who have been acquainted with your writing several years, expected you would read the general character, but did not expect you could so thoroughly exhaust the subject from the pictures."

A. H—, M.D.

WINDSOR, NOVA SCOTIA.

Persons who can not visit us may thus obtain correct delineations of character by sending likenesses and certain measurements which, with terms, are fully explained in "The Mirror of the Mind," which we send on application.

AGRICULTURAL HINTS.

HOW TO SELECT AND GROW FRUIT.—A writer in *Every Evening* furnishes the following valuable hints on fruit culture:

The great mistake of fruit growers in setting an orchard of either peaches, apples, or pears is they are anxious for too great a variety. Not knowing just what varieties are adapted to their soil and climate, they select from twenty to fifty different kinds, have a few of each, but not enough of any to make the sale an object; hence they pronounce fruit-growing a failure—no money in it. This is especially the case with peach and pear growing. Six or eight varieties of the peach are much better for commercial growers than twenty. A succession of varieties known and approved in the locality is all that is needed. Never plant a peach tree more than a year from the bud. A peach tree planted in the fall will make a better growth next season than if planted in the spring, other things being equal.

Any good corn land will grow the pear, and any land that will do well in peaches will do well in pears when well manured and properly cultivated.

Select but few varieties, and such as come in before or after peaches. No great, although a paying, price can be expected for pears that go into market when it is filled with peaches. Among the varieties that are known in Delaware to be steady bearers, good growers, and not subject to blight, rotting at the core, or falling of the leaves prematurely, are, of the very early, E. Manning, Bloodgood, Buerre Gifford; and Doyenne d'Ete; summer, or early fall, Bartlett, Doyenne, Bussock, and Seckel; late fall, Buerre Clairglou and Duchess d'Angouleme; winter, Lawrence, Buerre d'Anjou, Vicar of Winkfield, Winter Nellis, and Easter Buerre.

For six varieties ripening in succession from July 15th, take either E. Manning or Buerre Gifford, Bartlett, Duchess, Buerre d'Anjou, Lawrence, and Vicar of Winkfield. Lawrence and Bartlett only as standards.

From some of these varieties pears, with good culture, may be expected the third year, in the south particularly; with all by the fifth and sixth, when two and three year old trees are planted.

If the land is not naturally dry, under-drain, or in lieu throw up in squares, by deeply plowing in ten-foot lands each way, forming squares with elevated centers ten feet apart. Make the hole large enough to set the tree without bending the roots, and as deep as the dead furrows, or down to near the water line of the soil. Set two or three year old standards twenty feet, and dwarfs ten feet, each way, making three drops to one standard, and manure in six or eight inches below the tree roots, so as to invite the roots downward. Fill around the tree with surface soil pressed around the roots, leaving the ground two or three feet from the tree, rather ditching than crowning, mulched with leaves, straw, or litter, over which a little earth is thrown. Trees thus set will all live and make a good growth the first year, and come into early bearing often the second year from planting. I know of no orchards that are late in coming into bearing that were planted, cultivated, and pruned in a proper manner. Standard Seckels even have borne the third year from planting. Doyenne d'Ete the second year, Bartlett Standard the fourth, Buerre d'Anjou and Duchess the fifth. The average price of pears for ten years past through the season has been over \$12 per barrel; in New York often as high as \$20 and even \$30 per barrel, and never less than \$15. At such prices the masses can not indulge in them. The acreage of pears should be greatly increased, so that they can be bought at lower rates and come into more general use. They are as easily raised as peaches, and more baskets obtainable from an acre.

SHALL WE ABANDON FARMING?—"If one cause of our difficulties is over-production, do you recommend any proportion of farmers to abandon farming?" No, we do not—except such men as are losing money by farming every year they pursue it as a business. What we urge is the diversifying of products—the growing of more flax, hemp, roots, fruits, rye, broom corn, wool, herbs of various kinds, etc., in proportion to the amount of cereals grown. Grow more of what we import most of. Our resources are adequate to the production of nearly everything we consume that is produced from the soil. We can certainly grow our own cotton, rice, sugar, indigo, flax, hemp, silk, jute. And if the manufacturable material is furnished in sufficient quantity and with sufficient regularity, it will be manufactured. The unemployed labor in this country to-day ought to be utilized in just such work. We forget that the demand of modern society is for varied

products. True, the people must be fed; but because they require bread, fruit, butter, and meat, it does not follow that unlimited production of these articles will yield the producers compensation. If farmers learn how to produce what is least produced here and imported most, they need not abandon farming as unprofitable.

PREPARATION OF SEWAGE AND STABLE REFUSE.—Millions of dollars' worth of valuable material yearly finds its way, from the sewers of our great cities, into the sea, serving no purpose except to contaminate adjacent waters, while sums, equally large, are expended by agriculturists for the regeneration of worn-out soil by artificial fertilization. The collection of sewage presents no special points of difficulty, but its transportation to desired points is by no means readily accomplished. For this purpose an effective plan is greatly needed. One system, which we believe has recently been made the subject of a patent, consists in compressing the manure into cakes with dry peat, and covering the mass with soft clay or equivalent substance to prevent fermentation and evaporation. The idea seems to be a feasible one, though we have no record of its being successfully put in practice.

Other patents have been granted for the preparing and baling of stable manure. This substance, in order to prevent its otherwise too large accumulation, it is necessary to remove from city stables before the straw contained in it is in a sufficiently decayed state for fertilizing purposes. Consequently, the straw must be got rid of, and as it can be utilized for bedding for horses, or for the manufacture of coarse varieties of paper, it is suggested to winnow it out of the mass by means of a suitable machine. Then the residuum is compressed so as to exclude the air, to which the heat and steam of manure is due; and finally the whole is covered with a coating of clay, plaster, or cement.—*Scientific American*.

A USEFUL SOAP.—The following is recommended by those who have tried it for scrubbing and cleansing painted floors, washing dishes, and other household purposes. Take two pounds of white olive soap, and shave it in thin slices; add two ounces of borax and two quarts of cold water; stir all together in a stone or earthen jar, and let it sit upon the back of the stove until the mass is dissolved. A very little heat is required, as the liquid need not simmer. When thoroughly mixed and cooled it becomes of the consistence of a thick jelly, and a piece the size of a cubic inch will make a lather for a gallon of water.

WISDOM.

I HAD rather have newspapers without government than a government without newspapers.—*Jefferson.*

It is a remarkable peculiarity with debts that their expanding power continues to increase as you contract them.

THEY who in their age approve of the career of their youth, have generally had the wisdom of age in their youth, and have generally the vivacity of youth in their age.

IN wonder all philosophy began, in wonder it ends, and admiration fills up the interspace. But the first wonder is the offspring of ignorance—the last is the parent of adoration.

THERE is nothing which contributes more to the sweetness of life than friendship; there is nothing which disturbs our repose more than friends, if we have not the discernment to choose them well.

It was the policy of the good old gentleman to make his children feel that home was the happiest place in the world; and I value this delicious home-feeling as one of the choicest gifts a parent can bestow.—*Washington Irving.*

A WORTHY man thus wrote: "I expect to pass through the world but once. If, therefore, there can be any kindness I can do to any fellow-being, let me do it now. Let me not defer or neglect it, for I will not pass this way again."

THE character of the scenes in which we are brought up impress themselves upon our souls. Great fanatics generally proceed from sad and sterile countries. As is the place, so is the man. The mind is a mirror before it becomes a home.—*Oliver Cromwell.*

LAUGHTER is one of the gifts which distinguish men from animals. Mirth, so far from being one of the lower attributes of human nature, is one of the higher. It reigns in an innocent nature, and tends to perfect and brighten the mind wherever allowed. It may be said of this emotion as quaint Andrew Fuller said of anger: "He would it hath a maimed mind."

"MAKE WAY! make way, good people! I'm exceedingly cramped for space!" This was the exclamation of a poor worm, that had a whole field to himself, and acres to spare; but he wished the impression to go abroad that he was ten times as large as he seemed to be. There are many people in this world who act just like this poor worm.

You must elect your work. You shall take what brains you can, and drop all the rest. Only so can that amount of vital force accumulate which can make the step from knowing to doing. No matter how much faculty of idle-seeing a man has, the step from knowing to doing is rarely taken. It is a step out of a chalk circle of imbecility into fruitfulness.—*Emerson*

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

WHAT is that from which, if you take the whole, some remains? Wholesome.

THE man most likely to make his mark in the world—one who can not write his own name.

THE daughter of an Indiana Congressman eloped recently, taking the old gentleman's back pay along with her.

"HAVE I not, my son, offered you every advantage?" "Oh, yes, sir, but I could not think of taking advantage of my own father."

SAID Mrs. Jenkins, on her return from church: "When I see the shawls of those Johnsons, and then think of what I have to wear, if it wasn't for the consolation of religion I don't know what I would do."

"Does the train start this evening at thirty-five minutes past six, as usual?" asked an elderly lady of a railroad employé. "No, it leaves at twenty-five minutes to seven," was the reply. "Dear me, dear me, how they do change these trains!"

"YOUR children may never have wealth," observed a clergyman recently to his congregation; "but when they grow up it will be something for them to boast that their fathers were not members of the Forty-second Congress."

A PHRENOLOGIST told a man that he had Combativeness largely developed. "No," said the other, "I have not; and if you say that again I'll knock you down!"

THERE is a man in Troy who did business about a year ago without expending a dollar in advertising. He has at last consented to advertise. His first advertisement was headed "Sheriff's Sale."

A YOUNG man, "illiterate but polite," on being invited to attend a wedding, sent a note in response, saying, "I regret that circumstances repugnant to the acquiesce will prevent my acceptance to the invite."

As a shoddyite was looking at some paintings, the dealer pointed to a fine one, and said, "There is a dog after Landseer." "Is it really?" exclaimed the new-found nabob; "What is the dog after him for?"

Two Quaker girls were ironing on the same table. One asked the other what she would take, the right or the left? She answered promptly, "It will be right for me to take the left, and then it will be left for thee to take the right."

A GOOD lady who on the death of her first husband married his brother, has a portrait of the former hanging in her dining-room. One day a visitor, remarking the painting, asked, "Is that a member of your family?" "Oh! that's my poor brother-in-law," was the ingenuous reply.

A GOOD joke on a young city fellow, who bought a farm last winter, has just leaked out. He had a fine orchard of about two hundred apple trees, and a few weeks ago he tapped every one of them for cider. As it didn't run very well, he inquired of a neighbor what the matter was, and gave him a new hat not to tell any one else.

A MAN who had missed his way fortunately overtook a boy going with a pot of tar to mark his

master's sheep. He asked him the road to Banff, but was directed by so many turnings, right and left, that he agreed to take the boy behind him on his horse. Finding the boy pert and docile, he gave him some wholesome advice, adding occasionally, "Mark me well, my boy." "Yes, sir, I do." He repeated the injunction so often that the boy at last cried out, "I canna mark ye ony mair, as the tar has geen oot."

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. One question only at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

LEATHER IN FOOD.—A paragraph has been going the rounds of the press which states that in our food we may swallow a good deal of leather in the course of a year. Is it true?

Ans. Yes, it is true, especially if you make tea and coffee part of your regular dietary. To fairly ventilate this subject, it would be well for us to inquire into the manner in which leather is made. This is accomplished by steeping skins in an infusion of certain vegetable materials which contain a substance called tannin. This tannin exists more or less in most plants, and especially in some barks. The best, or that which is generally considered the best of the barks, is oak. Water dissolves out the tannin, and so what there is of that ingredient in coffee or tea is in great measure abstracted by the hot water in which these articles are "drawn." However, to make leather it is necessary, as in the case of tanning hides, that albuminous matter be brought into contact with the tannin. This albumen is found in the milk used to render the beverage more acceptable to the taste of most people. Tannin and albumen have a very strong affinity for each other, so that when brought into contact they instantly unite, and the result of the union is the insoluble, enduring, tough material, leather. Chemists call it tannate of albumen. Tannin is the ingredient in

tea and coffee which gives them most of their taste, and when milk, cream, or egg is added to the tea and coffee, the union which immediately takes place between the tannin and the albumen deprives the beverage of the tannin flavor. If one would make a strong decoction of tea, and then pour milk into it, the preparation, if examined with a strong microscope, will show small particles of leather floating in it; and if the decoction be extra strong, an actual precipitate or deposit of the tannate of albumen will take place in the course of time. Now, presuming that a person takes a cup of tea with pure milk three times a day, and allowing one grain only of leather to be formed in each cup, it will be found that in the course of a year he will have swallowed enough leather to make a pair of shoes.

PERSONAL MAGNETISM.—Does the amount of personal magnetism in an individual depend on bodily conformation or temperature, and is there any sign by which we can detect its existence by coming in contact with the person?

Ans. The physical organization certainly has much to do with the influence of persons upon others. Generally those who are coarse in organization, who have a bilious temperament very strongly marked, exercise a sort of passive influence, while those who are abounding with the juices of life, and have the vital qualities well indicated in the fullness of the face, the roundness of the limbs, and sprightliness of the demeanor, and cheeriness of language, are cordially received by others, and generally they exercise an influence upon the world which is elevating and encouraging. Some persons attract us at first sight. There is an atmosphere, as it were, radiating from them which affects our own being and compels our sympathy.

The indication or external sign of attractive or of repellant qualities is found in the temperament chiefly, as we have already indicated, but it must be admitted that in some cases the sign may not be so marked as to impress one. Those who have

doubts with respect to the characteristics of a stranger, especially if they are experienced in the reading of character from Physiognomy and Phrenology, will wait before they come to a conclusion for some action or expression on the part of the individual; will wait, for instance, until they have seen and heard him speak. It must be appreciated, too, that our impressions of others depend upon our own physical and mental organization, and, therefore, upon our own susceptibilities.

"SELF-DENIAL."—How shall I go to work so to crucify the flesh as to meet the Scriptural requirements of self-denial? How may I take up the cross?

Ans. One is not to deny himself anything which is good for him. God made this world for man, and not man for the world. All of God's ordinances are for man's use and man's good. We are not to deny ourselves food, raiment, fuel, homes, society, education, the culture of all our faculties, association in wedlock, or the right use of any organ of the body or any faculty of the mind. It is simply the *abuse* of these we are to avoid. If one be inclined to eat too much, or drink too much of that which would in proper quantities do him good, he is to deny himself from indulging in excess, or in thus *perverting* his nature. To take up the cross is simply to do our duty when it may be contrary to our inclinations. Jonah was commanded to go to Ninevah to preach; he disobeyed, and—you know what happened.

One is commanded to follow "The Commandments." It may be a cross at times to do so, but he *must* do it, or forfeit the blessing which would follow the doing it. We are required to "pray without ceasing." It may be a cross to do this, but it may and ought to be done. It simply means a constant desire to be in agreement with the will of God; the possession of a submissive spirit, which says, "Thy will be done."

POETS vs. ORATORS.—It has been said poets are born, and that orators are made. Which is really greatest, the poet or the orator?

Ans. Both are great, and each, to "rise and shine," must be "touched" by a power above the reach of sense—must be moved by the spirit. Both develop the same faculties; but, as the painter brings color to his art, he occupies a higher plane than the sculptor, who works out his images without color. So the poet may be said to exercise faculties not so necessary to the orator. But the best man uses *all* his powers in fullest measure. The hand may be higher in location and in function than the foot, but it can not well dispense with the more humble member.

STAMMERING.—The quacks with their professed secrets are in the field scattering circulars proposing to cure stammering, their prices ranging from \$50 to \$100. So far as we know all these are simply quacks or impostors, or both.

Those who would know the cause and cure of

this infirmity, may find it fully stated in the "Illustrated Annuals of Phrenology and Physiognomy," a book of some 400 pages and 300 illustrations. Price, \$2; may be had at this office.

GEOLOGICAL INQUIRER.—The works or treatises mentioned by Dr. Huyette in his interesting article are to be found as follows: Hunt's Lecture in the Smithsonian Report for 1869; Hall's "Evolution," in the files of the New York *Tribune*, by which it was reported sometime since; and Shaler's paper is in the collection of the Boston Historical Society.

SPECIAL TALENT.—I have a brother, aged fifteen; has one short leg; is light and spindling; apt at all his studies; has always been very fond of picture-making. While riding along the road, will draw everything that comes within his observation. His school-books have every blank spot filled with some of his drawing. His friends are poor, and can not educate him as he should be. 1. From the above would you judge that by proper training his apparent talent could be used in making him a good livelihood? [Yes.] 2. What calling would you think him best qualified for? [An artist.] 3. How shall we proceed to cultivate his talent? [Send him to Cooper Institute.]

STATE AND TERRITORY.—What is the real difference between a State and a Territory?

Ans. The States of our Union have an internal organization of their own; they elect their own officers, and control their own civil affairs; while the Territories are subject to the control of the general Government, their officers and Legislature being appointed by the general Government. Such difference continues until the Territory is admitted into the Union as a State.

FULL FACE.—Is a full face a sign of kindness.

Ans. Generally those having full faces are largely endowed with the vital temperament, and are known for their frankness, sprightliness, and general good-nature. Take a florid, chubby-cheeked man, and you will find one who is demonstrative and active in whatever he does. His susceptibilities are quick, and he responds to their stimuli.

Other questions, deferred for want of space, will be answered in our next.

What They Say.

FEAR NOTHING.—Among mortals we find no model man. There has lived none such as we would be satisfied to be. Yet there have been men of whom humanity is proud, and to be like them it is well to aspire. Millions of human beings have lived and died, of whom to-day the world knows not by what name they were called. True, it is better thus to be forgotten than to be remembered as a wrong-doer, for it is better to do

nothing than to do evil, but it is better still to be remembered as a benefactor of the world.

Notice, then, what were the lives and characters of those who have been the most successful agents in advancing the well-being of the race. Various, indeed, they were, but in one thing they were alike—they were courageous. See Luther defying the church of Rome; see Knox, so fearless of his sovereign; look on those that have been leaders in every reform and champions against oppression—those that are

“To memory and to freedom dear”—

and see what brave hearts were theirs. What is the lesson that we learn from this? Is it not that, if we would “make our lives sublime,” we should fear no evil? Fear nothing but sin. The cause that is just will prevail. The reason that so many false doctrines and evil institutions exist is, because they have not been thoroughly exposed or vigorously combated. Men are not naturally so prone to evil as some suppose. Prejudice darkens many minds, and they lack knowledge more than they lack morality. But there is also evil in the world that can be overcome only by the power of an earnest and fearless opposition. Fear not to face the facts, for it is the part of one that doubts the justness of his cause. The cause that is just will appeal to them; the doctrines that are true are sustained by them.

W. D. PRATT.

SOME PERSONAL THOUGHTS.—Few people are found in this world who do not believe in Physiognomy; but many of those who believe in that science refuse to accept Phrenology. It is just as natural for one to judge character by the face as it is to judge of strength by the appearance and quality of the muscles; yet many who do thus read character will deny, nevertheless, that they believe either in Physiognomy or in Phrenology.

Now, this face-science is Physiognomy, and *all* really believe in it more or less. People say that they do not believe in what they call “bumpology;” they do not believe the brain to be divided into separate organs, and each organ performing its peculiar function. If a person will admit that an individual carries certain marks of character in his face, then why not believe that the same is true of the brain also? Now, if a man’s disposition, his nature, and, in fact, his whole character will so stamp itself on his countenance as to be visible to a certain extent, why will not the brain, which is the throne of the mind, and the fountain-head whence all thought must originate, give even more and stronger indications of character than the face?

The brain is the acknowledged seat of the mind, and the mind is the master of the body; and, as the will is an attribute of the mind, and every action is decreed by the will, then why is it that men refuse to accept Phrenology, and claim that there is no such thing as this brain-science?

To believe in Physiognomy and not in Phrenology is as wise as to believe that a man can be made as drunk by the smell of liquor as he can by drinking it. To believe that the face gives indications of character, and yet believe that the brain, where every thought must originate, gives none, is simply absurd. If the nature of a man’s thoughts can be read from his face, it will certainly give more idea of character to go back to the brain—the seat of mind and the parent of thought—than to judge from the countenance merely. The water of a stream may taste of salt, but trace it up and near the origin of the stream, or some of its tributaries, you will find the water more salt, if you do not come to the salt spring itself; so, if you get an idea of character from the countenance, trace it back to the brain and you will find stronger indications in favor of your opinion, if it be correctly drawn.

Some opponents of Phrenology will point to a man and tell you, “That man drinks.” How do they know? because he has a “rum-blossom” on his nose? Yes, he does drink, and has face-marks to show it; but go to his brain, examine his head, and you will find the passion of appetite strongly marked. By the face he can be stamped as a drunkard, but to what extent he is likely to carry his drinking, unless some powerful counter-acting influence be brought to bear, can best be determined from the brain.

The time is coming when those who oppose Phrenology will have to forego their prejudice and acknowledge it as a true science. Hand in hand with Physiognomy, it is destined to prove a great blessing to mankind.

LITTLE TOM.

CENTENNIAL PRIZES.—An Oregon correspondent recommends that on the occasion of the American Centennial there be a premium offered for the best poem on the rise and progress of American liberty. “This will invite honest competition from every poetical mind in the country. Each and every one will do his very best, and the result will be a history of our struggles and triumphs for a hundred years, written in the beautiful language of poesy.”

PULLING HAIR TO GET MONEY.—On the outskirts of one of our western cities a public school-house has lately been erected for the accommodation of those residing in that district. It is a plain but artistic-looking edifice, substantially built and neatly furnished. When completed *all* who were interested in it were invited to meet in the building on Monday evening, September 1st, for the purpose of electing officers, etc. Speeches by some of the leading men of the city, and vocal music, were part of the programme for the evening. The officers were duly elected and the bill of expenditures read, the sum total amounting to a little over \$11,000. The speakers were then announced. The first was a local preacher, a tall,

fine-looking man, whose practical remarks and witty criticisms were very amusing. Next came an old Welshman, of rather large proportions, with a broad, good-humored-looking face, who addressed his remarks to the children in the following manner: "Now, children, what you want is to be *larn't*, and I want you to get hold of some of them there fellers what's got money, and pull their hair until you get them to lay a board walk along this here road." After enlarging upon the merits of the building and the demerits of the road, he closed with the characteristic remark: "And now I'll give my place to some one what can talk." This plain-spoken farmer caused a good deal of merriment, but I am sure those "fellers what had money" must have felt reproved for neglecting such an important item as the "board walk." This oration was followed by a song, "We Welcome You," etc., one of the vocalists saying that one of their number being absent they would have to "run on three wheels." After this several persons were called upon to speak, but respectfully declined. Finally a gentleman came forward, and "made a long oration," endeavoring to impress upon the minds of the people the necessity of public schools. His words were well-chosen, although inclined to be rather fiery. The meeting closed at half-past nine; every one apparently satisfied with the building, and pleased with the evening's entertainment.

— HELLENA.

LAW AND PHRENOLOGY.—A correspondent writing us from the West, who has been for some time in the practice of the law, but who is now practicing Phrenology and lecturing thereon, says: "While pursuing the law I saw more dishonesty than I ever thought of in years of lecturing. I believe lawyers will keep everything but their promises." Pretty severe on lawyers, but it is one of them who speaks.

MIND—COLOR.—An Attic philosopher cyphers out the following. He replies to a priest who says, "*Nature is hid in mystery.*" The philosopher says, Nature is seen and read of all true men, as clearly as color is defined and interpreted:

Order of Mind.

Yellow or Gold (sunlight).....	Intellectual.
Blue (sky).....	Esthetic.
Brown (earth).....	Animal.
Green (verdure).....	Social.
Red (tone).....	Spiritual.

What say the scientists to this new classification?

SWEDENBORG AND PHRENOLOGY.—J. C. W. says: I write to direct your attention more particularly to passages of Swedenborg bearing on the subject of Phrenology. I cite you to the "Divine Love and Wisdom," §§ 366, 373, 384. Please read also in the "Arcana Celesta" § 4,039 to 4,054 inclusive. Read also from § 6,598 to 6,626, in which you will find a presentation of the mental science such as can be found nowhere else. No-

tice especially § 6,607 as to the bearing on Phrenology. Read also § 7,836. You will object that Swedenborg makes the heart, stomach, lungs, spleen, etc., to be organs. I think the above-cited section, § 366, in "Divine Love and Wisdom," reconciles this, for the effort is to make these viscera, and, indeed, every part of the body, the ultimates, so to speak, of the brain; hence, when Swedenborg speaks of a spirit as belonging to the province of the stomach, it is the same as if he had located him in that part of the brain which ramifies to the stomach—possibly to the organ of Alimentiveness. In "Divine Revelations of Nature," at § 169, speaking of Swedenborg's "Economy of the Animal Kingdom," the writer represents it as being perhaps more full and clear as to the bearing of Swedenborg's philosophy on Phrenology than any of the passages to which I have cited you above. If you conclude to investigate the subject, and treat of it in the JOURNAL, you ought to examine the latter book. [We have.—ED.]

BANK OF ENGLAND NOTES.—In referring to "Bank of England Forgeries," at page 326 of the November number, we stated, "No notes for less than £1—\$5—are issued." Mr. J. A. Mowatt reminds us that in England no notes are issued for less than £5—\$25. The Bank of Ireland and the various other banks of issue in Ireland and Scotland, issue notes for £1; but in England the smallest note in circulation is for £5. A very celebrated Methodist minister went from England to preach special sermons in Belfast, in Ireland, and special collections were taken up after the sermon. The preacher considered they had been doing well. "I think," said he, "that I saw about 50 notes alone placed on the plates. That will be £250." He was sadly disappointed when informed that each note was for only £1 instead of £5. He resolved that, however useful small notes might be in ordinary business, they were most mischievous on days of special collection for church purposes, even after brilliant sermons.

THE PHRENOLOGICAL JOURNAL.—This publication needs no words of praise or commendation at our hands, for it has built up a national reputation peculiarly its own. In glancing at its contents, there are to be found articles touching on various matters that will prove of interest to the reader.

Printers' Circular.

HERE AND THERE.—An English clergyman, when remitting his subscription for the PHRENOLOGICAL JOURNAL, writes from Cheshire, as follows: "You Yankees popularize knowledge; we confine it to Oxford and kindred places, until it grows rusty." [Yes, here the common people know something of science and philosophy, and newspapers and magazines bring the best knowledge home to every house. We also have free schools in America.]

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

YALE LECTURES ON PREACHING. By the Rev. H. W. Beecher. Delivered before the Theological Department of Yale College, in the regular course of the "Lyman-Beecher Lectureship on Preaching." From Phonographic Reports. Second Series. 12mo, cloth. New York: J. B. Ford & Co., 1873. Price, \$1.50.

We are not surprised that a second series of Yale Lectures should be given to the public, when we consider the success of the first. The inquiry on the part of many young clergymen is what is the cause of Mr. Beecher's wonderful success as a preacher, a lecturer, and a writer? In these "Yale Lectures" Mr. Beecher gives the "secret" of his success. These are the topics on which he lectured the Yale students: Choosing the Field; On Prayer; Methods and Benefits of the Prayer Meeting, its Helps and Hindrances; Relations of Music to Worship; Development of the Social Element; Bible Classes; Mission Schools; Lay Work; the Philosophy of Revivals; Revivals subject to Law; their Conduct; Bringing Men to Christ, etc. Under each of these separate headings is a list of special topics belonging to the work of the ministry.

Mr. Beecher has condensed thoughts enough under these headings to fill an encyclopædia, if elaborated. It is precisely such matter as clergymen of all denominations would profit by perusing. The ordinary reader and all laymen will become richer in mind and soul for taking in these grand thoughts and utterances.

Mr. Beecher bases his work on the constitution of man and on the revelation of Holy Scripture. He puts men into communion with the Divine Will, or points the way thereto.

A SELF-MADE WOMAN; or, Mary Idyl's Trials and Triumphs. By E. M. Buckingham. 12mo; fancy cloth; pp. 343. Price, \$1.50. New York: S. R. Wells, Publisher, 389 Broadway.

This new volume by a young American writer, whose sprightly sketches of our social life are familiar to many readers, has those elements of freshness and naturalness which have become essential to the success of a novel. The story, however, is not altogether a fiction, for, while imagination lights it up with a vivid play of warm description and earnest sentiment, the ground-work of reality now and then peeps out in refreshing contrast with its brilliant setting. The plot relates to a highly organized, intense, soaring student, teacher, and governess, who finds her path hemmed in with difficulties of a most discouraging character; but determined on self-improvement

and success, she hesitates at no sacrifice, halts in no effort to reach her aims; and after long years of toil and suffering, the poor, neglected, mal-formed, struggling girl becomes the fully-developed, happy, triumphant woman. As we follow Mary Idyl in her chequered career, and see her gathering strength as she proceeds, culling every flower of joy and suppressing every withered leaf of disappointment, we can not but sympathize with her moods of exaltation or dejection, and rejoice in her final victory. The literary reader will be gratified with the excellent taste shown in the selection of mottoes with which the forty or more chapters are headed, and which in themselves constitute a collection of poetic gems worth all that is asked for the entire book. As a holiday book it is attractive, offering within its covers at once an agreeable story, and much timely admonition suited to the young.

THE WOMEN OF THE ARABS. With a Chapter for Children. By Rev. Henry Harris Jessup, D.D., seventeen years American Missionary in Syria. Edited by C. S. Robinson, D.D., and Rev. Isaac Riley. 12mo; pp. 372. Price, \$2. New York: Dodd & Mead.

We have here the state or condition of women among the Arabs of the Jahailiyeh, or the "Times of the Ignorance," and also in the Mohammedan world; "An Account of the Druze Women;" "Chronicle of Woman's Work from 1820 to 1872," which shows real progress; "An Account of Mr. Whiting's School;" "Modern Syrian Views with regard to Female Education;" "The Bedouin Arabs;" "Women Between Barbarism and Civilization;" "American Women in Syria;" "Work for Women and Girls in this Field;" "Mission Schools;" "A Chapter for Children." Here is food for reflection. Let the philanthropist look into this subject and consider what his duty may be toward these benighted people. He will at once find that there is something for each and all to do.

A MAN OF HONOR. By George Cary Eggleston. Illustrated. One vol., 12mo; pp. 222; muslin. Price, \$1.25. New York: Orange Judd Company.

Mr. Eggleston delineates character with an aptness which bespeaks an intuitive knowledge of his fellow-men. He is by nature a dramatist, representing all phases of life—the witty, the serious, the sensible, and the simple. He takes the measure of men, sets them before you, and they perform their part according to the programme. Whether he aims to give his stories a "high moral tone" or not is settled by the fact that one can not rise from their perusal without kindlier and holier resolutions. Because he sometimes comes down to the capacity and the sphere of stage-drivers, flat-boatmen, and gamblers, it does not follow that he indorses their low ways; indeed, it is his to depict life as he finds it, and often to suggest how it may be elevated and improved.

PETER STUYVESANT, the last Dutch Governor of New Amsterdam. By John S. C. Abbott. Illustrated. One vol., 12mo; muslin; pp. 362. \$1.50. New York: Dodd & Mead.

One never tires of hearing about his progenitors; and, on the same principle, one is always interested to know every detail of the early history of his country. We have here, "The Discovery of the Hudson River;" "Commencement of Colonization;" "The Administration of Van Twiller;" "An Indian War and its Devastations;" "Governor Stuyvesant;" "Account of the War between England and Holland;" "Encroachments of England in America;" "Hostile Measures Entered Upon;" "The Capture of New Amsterdam;" "All in the Olden Time." Mr. Abbott gives us a history of the pioneers and patriots of America, including De Soto, Daniel Boone, Miles Standish, and other worthies, with suitable illustrations. It is the gist of much historical research, and is written in the most agreeable and instructive style. Old and young will enjoy it alike.

THE CUMBERSTONE CONTEST. By the Author of "The Best Cheer," "The Battle Worth Fighting," etc. One vol., 12mo; pp. 359; cloth. Price, \$1.50. Dodd & Mead.

This is the story of Tom Warne, a boy ten years old, whose mother was ill and finally died. His father was the clergyman of Cumberstone, and had two daughters and three sons. Tom was the trial of his life, and while a little boy had made up his mind that he would sometime follow the example of Joe Purkiss, and run away from home; which he did one stormy night, but was brought back, and had a sickness from the effects of the wetting he got. During his illness he saw cause to repent of his waywardness, and his contest with himself at that time is what gives the title to this book. It is written, evidently, for boys of the class and age with Tom, but others may read it with benefit.

THE SON OF THE ORGAN-GRINDER. By Marie Sophie Schwartz, authoress of "Gold and Name," "Birth and Education," "Guilt and Innocence," "The Right One," etc. Translated from the Swedish by Selma Borg and Marie A. Brown, the translators of "The Schwartz," "Blanche," "Tropelius" etc. One vol., 12mo; pp. 353; cloth. Price, \$1.50. Philadelphia: Porter & Coates.

Madame Schwartz has been an accepted writer for many years, and always inculcates morality and true republican sentiments. Conny, the hero of "The Son of the Organ-Grinder," inherited many characteristics from his mother, who died when he was six years old. She was beautiful and good, sympathizing with those who suffered and sharing with the needy. From his father he inherited a stalwart frame, and not merely the name of being "The Son of the Organ-Grinder," but also the son of a murderer and suicide, which reputation proved a hindrance to every effort of his life. However, his brother being older, took charge of him, and after many hard struggles

Conny became a lawyer of distinction. The lesson taught by the story is *nil desperandum*, for if under such discouragements one can rise as he did, every one may have much to hope for.

Misses Selma Borg and Marie A. Brown, who have translated this story from the Swedish language, have done well, and thereby complimented the author and commended themselves. Messrs. Porter & Coates have printed and bound the book in excellent taste, embossing the cover with the Swedish coat-of-arms and "Svea," the ancient name of Sweden.

ON THE AMAZONS; or, the Cruise of "The Rambler," as recorded by Wash. Edited by C. A. Stephens. Illustrated. 18mo; cloth; pp. 258. Price, \$1.50. J. R. Osgood & Co.

The interest discovered by the reading public in the series of entertaining volumes of which this is volume VI., has led to the extension of the series somewhat beyond what was contemplated in the start. In fact, the volumes have grown in attractiveness with each issue, and we are of opinion that those of our readers who have read "Camping Out," "Left on Labrador," "Off to the Geysers," etc., will pronounce "On the Amazons" the most sprightly and satisfying. There is a good fund of information relating to that most remarkable of rivers in the book, neatly mingled with the many diverting incidents, which must please our reading American youth.

CHRISTOPHER CARSON, familiarly known as Kit Carson. By John S. C. Abbott. With Illustrations by Eleanor Greatorex. 12mo; pp. 342. Price, \$1.50. New York: Dodd & Mead.

Among all our Western pioneers none in modern times has been more noted than Kit Carson. His life among the Indians on the Rocky Mountains, hunting, trapping, fighting, exploring, surveying, has been greater than any other one since Daniel Boone, the great hunter of Kentucky. Mr. Abbott has given us an interesting sketch of this remarkable man, whose name will go down to posterity among the leading characters of Western America.

HESTER MORLEY'S PROMISE. By Hester Stretton, author of "The Doctor's Dilemma," "Bede's Charity," etc. 12mo. Price, \$1.75. New York: Dodd & Mead.

Another story by a popular author depicting life in its various phases. John Morley is a bookseller; he had a step-mother; he also had a pastor, and there were deacons; a monomaniac comes upon the scene; distinguished characters are made; new hopes are formed; Sunday visitors are described; a great gulf is crossed; the slough of despond is met; conscience is awakened; a prodigal returns; castles are built in the air; a painful discovery is made; munificent gifts are bestowed; a pastoral visit enjoyed; one is found alone in London; he loses his reason; good news is broken; "home again;" forgiveness is experienced, and last words are uttered, making altogether a readable story.

THE DANBURY NEWS MAN'S ALMANAC, and Other Tales. Carefully Compiled by the Author and another Astronomer. Applicable to any Latitude that you are; and Warranted to Contain more Weather for the price than any Book of the kind in the Market. 1874. 12mo. Price, 25 cents. Boston: Shepard & Gill.

The Danbury man was a born wit, and leaped into publicity at a single bound. Yesterday he was not; to-day he is quoted throughout the land as one of the funniest of our funny writers. Of course his Almanac should be found in every chimney corner.

THE VOICE, AND HOW TO USE IT. By W. H. Daniel. One vol., 12mo; pp. 111; muslin. Price, \$1. Boston: James R. Osgood & Co.

So little is known in regard to the vocal organs that the public will heartily welcome any attempt at its further elucidation. The little manual by Mr. Daniel gives us many valuable suggestions in regard to the culture, strengthening, and management of the voice in music. He concludes with the statement which many will question, namely, that "*all* can become singers."

A MANUAL OF ETIQUETTE. With Hints on Politeness and Good Breeding. By "Daisy Eyebright." One vol., 12mo; pp. 170; cloth. Price, 75 cts. New York: G. P. Putnam's Sons.

Daisy Eyebright is a lady of high education and great sensibility—a lady who occupies a high social position, and that, too, on her merits. She has long been connected with the press, and has written much, and always well. This excellent manual from her pen will prove instructive and encouraging to all who read it. We wish a copy could be placed in the hands of every American.

CHOICE TRIOS for Female Voices; Intended for Seminaries, High and Normal Schools, and Vocal Classes. Selected and Arranged by W. S. Tilden. One vol., oct.; pp. 160; boards. Price, \$1. Boston: Oliver Ditson & Co.

There are in the present handy volume upward of eighty choice pieces of music. Among the others we may name the following, which is a guarantee of the excellence of the author's selections: "Nymphs of Air and Ancient Sea," Henry Smart; "Now the Golden Morn," Verdi; "Whither Hath the Wood-Thrush Flown," Hatton; "The Dawn of Spring," Mendelssohn; "The Quiet Night," Abt; "Wake, Gentle Zephyr," Rossini. Let copies be furnished to every household.

ST. NICHOLAS. Scribner's Illustrated Magazine for Girls and Boys. Conducted by Mary Mapes Dodge. Vol. I., No. 2. Dec., 1873.

Among all the juvenile magazines published in this or in any country, *St. Nicholas* promises to be the best; and American children will have cause to be thankful that so elegant and instructive a periodical may bring them words of hope, cheer, and instruction every month in the year. In this, amusement and instruction are happily combined. Nor is it in any way objectionable on grounds of sectarianism or latitudinarianism. It is healthful,

and just the thing for each juvenile member. "Welcome, *St. Nicholas!*" say we.

THE NATIONAL TEMPERANCE ALMANAC and Teetotaler's Year-Book for 1874. 12mo; pp. 64. Containing, in addition to the Calendar and Astronomical Calculations, Statistics of Intemperance, Lists of Grand Bodies, National and State Societies, with Post-office address of Chief Officers, a full Directory of all Temperance Organizations of New York City and Brooklyn, Temperance Papers and Puzzles, Publications, Anecdotes, Stories, Illustrations, etc., etc. By J. N. Stearns. Price, 10 cents. New York: National Temperance Society.

Put a string in it and hang it up by the mantel or in some other conspicuous place, where it may be taken up and read at any moment when there is a moment of leisure. Every sentence it contains is a sermon to enlighten and restrain. Order a dozen copies and give to your neighbors.

VICK'S FLORAL GUIDE FOR 1874. Octavo; pp. 140. 25 cents a year.

The cheapest and most beautiful of all the seedsmen's publications. Mr. Vick seems to have a genius as well as a high artistic taste for his sort of work. Send him "a quarter," and ask for "The Floral Guide," and thank us for calling your attention to it.

THE NORTH AMERICAN JOURNAL OF HOMEOPATHY, for November, 1873. Quarterly. Octavo; pp. 150. Price, \$1 per number, \$4 per year. S. Lilienthal, M.D., Editor. New York: Boericke & Tafel.

Dr. Lilienthal continues to edit this venerable quarterly, now in its twenty-second volume. If not popular, it may claim to be profound, as it contains the best thoughts of the leading physicians of its school. Homeopathy made a great schism in allopathic medical practice. It awakened public attention to the necessity of understanding the laws of life and health, and, in a measure, prepared the way for hygienic reformers, who propose to dispense with drug medicines of all kinds.

SOUNDS FROM SECRET CHAMBERS. By Laura C. Redden (Howard Glyndon). One vol., 18mo; pp. 197; cloth. Price, \$1.50. Boston: James R. Osgood & Co.

This is a charming little book, full of sweet poems. Miss Redden—"Howard Glyndon"—has written much, and always sensibly. We have seen nothing, indeed, from her pen which is not worthy of perusal and preservation. We hope to see, in a more extensive volume, a compilation of her prose writings. Why not?

LECTURE ON BUDDHIST NIHILISM. By F. Max Müller, M.A., Professor of Comparative Philology in the University of Oxford; Member of the French Institute etc. Delivered before the General Meeting of the Association of German Philologists, at Kiel, 28th Sept., 1869. Translated from the German. Price, 10 cents. New York: Asa K. Butts & Co., 36 Dey St.

The title sufficiently explains the object of the pamphlet.

MATERIALISM, Its History and Influence on Society. By Dr. L. Büchner, author of "Force and Matter," "Man in Nature," etc. Translated by Alexander Loos, A.M. Price, 25 cents. New York: Asa K. Butts & Co.

This is what its title implies—a history of materialism. Its teachings accord with those of what are known as free religionists, and exalts science and philosophy above what it would denominate "Emotional Religion."

THE INFLUENCE OF CHRISTIANITY ON CIVILIZATION. By B. F. Underwood. Price, 25 cents. New York: Asa K. Butts & Co.

Mr. Underwood says that "Christianity has opposed and hindered scientific discoveries by making the crude speculations of man in early ages 'the authoritative standard of fact, and the criterion of the justice of scientific conclusions' in modern times." He further says that Martin Luther was a bitter opponent of Copernicus. He called him an old fool, etc. The spirit and purpose of the pamphlet may be seen from the above.

WILD THOUGHTS IN RHYME. By Arnold Isler. Smythe & Co., Columbus, Ohio. 12mo. Price, \$1.25.

The author opens his beautiful book with a "Lament," but closes it when "Rusticating." He poetizes on various subjects, among which are Kissing on the Sly; My Girl; To My Little Darling; Woman's Work; A Practical Blessing; Her Beau; The Hymenean Age; Sweetheart of Mine; Waiting for the Stage; The Prisoner; The Chieftain, etc. Making altogether a *recherche* little volume, not particularly "wild."

CHRISTIANITY AND MATERIALISM. By B. F. Underwood. Price, 15 cents. New York: Butts & Dinsmore.

Mr. Underwood says, "The devil is a humbug," and that "Jesus was probably a reformer, and come-outer, and infidel of his time." The present is better than the past, and the golden age of the world is in the future. Mr. Underwood affiliates with the teachings of Mr. Thomas Payne.

WATSON'S MUSICAL MONTHLY. Henry C. Watson, Editor. Published at 746 Broadway, New York. \$2 per annum.

This is a new undertaking, and the enterprise in the hands of so energetic an author and publisher as Mr. Watson, will probably secure it an immediate success.

FOREST AND STREAM.—This handsome quarto weekly of sixteen pages is neatly printed on good paper, and is devoted in general, as its title indicates, to field and aquatic sports. It also treats of natural history, fish culture, the protection of game, preservation of forests, and healthful out-door recreations and study. The office is in New York, Charles Hallock being manager-editor. The department of "Woodland, Lawn, and Garden" is under the editorial care of Mr. L. Wyman, who for many years was associated

with the late A. J. Downing in practical and editorial work. His articles in the department of "Gardening and Horticulture" will be reliable, interesting, and clean cut. He conducts also the book review department, and most literary people recognize him as a thoroughly honest reviewer. Anything for review addressed to him, care of the "Forest and Stream," 103 Fulton Street, New York, will receive due attention.

It has been too much the custom in this new country of ours to regard the forest as a foe. The pioneer who hurriedly rolls up a log hut in the midst of an unbroken forest is anxious to let in the sunshine and clear away the forest from his new home; and, indeed, his first wheat crop and corn crop depend upon the sunshine, and the little "patch" looks small to him, and he feels in a hurry to get the forest elbowed out of his way. He cuts, therefore, the noble oaks, black walnut, cherry, or whatever else shuts out the sun, and rolls them into heaps and reduces them to ashes as fast as he can. Twenty years afterward there is scarcely a green tree standing within a quarter of a mile of his house. The next generation bemoans the folly of the pioneer, and makes sometimes a feeble effort to remedy it by fruit and ornamental trees.

MR. B. S. OSBON, Publisher, 40 Burling Slip, New York, announces for immediate publication the "Progressive Ship-BUILDER." By John W. Griffiths, author of "Theory and Practice Blended in Ship-Building," "Ship-Builders' Manual," late editor "Nautical Magazine." To be completed in 16 monthly or semi-monthly parts. This will be an exhaustive treatise on the science and art of building ships, forming, when complete, a handsome volume, containing nearly six hundred pages of reading matter, and full-page lithographic illustrations. Price, for the work complete, \$8.

THE CHRONOTYPE, an elegant parlor journal, issued monthly by the American College of Heraldry and Genealogical Registry, No. 67 University Place, New York.

Publishes Family Memorials, with Portraits, embracing the history of places, persons, and events. Pioneers, or leaders in the great enterprises of the country, and inventors, have here an opportunity to record such memorial as they may wish. This journal also contains much very important and very interesting general matter.

PRETTY PICTURES.—The publishers of *Hearth and Home*, a fine pictorial \$3 weekly, and of the *American Agriculturist*, a \$1.50 monthly, have provided for each and every subscriber a beautiful chromo, which is sent free if unmounted, and for 50 cents mounted and post-paid. The subjects are, "The Strawberry Girl," for *Hearth and Home*, and "Mischievous Brewing" for the *Agriculturist*. The papers without the chromos are well worth the subscription price.

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[WHOLE No. 422.]



RICHARD ANTHONY PROCTOR, THE ASTRONOMER.

RICHARD ANTHONY PROCTOR.

THIS distinguished astronomer, following in the track of so many of England's best scientists, is now visiting America, examining our institutions, conferring with our scientific men, and giving public lectures on his favorite themes. He is an out-and-out Englishman, so far as physical characteristics or the temperaments are concerned, and his mental organization exhibits the sturdiness and thoroughness of the true Briton. Like all astronomers of any claim to general respect, he has a broad head, with a large anterior development, the supra-orbital range of faculties being marked. His brain and nervous system are well nourished by an unusually vigorous body; every feature of his countenance exhibits exuberant health, abounding vitality. His brief career as a scientist has been characterized by assiduous study, but an indulgent nature has sustained to the full every effort. A comparatively young man, he has laid the foundation for a future which, unless he prove derelict to his higher nature and the principles of true manhood—and this we regard as unlikely—will cover his name with honor.

RICHARD ANTHONY PROCTOR was born at Chelsea, England, on the twenty-third of March, 1837. Through both his parents he was descended from good old English families.

Although now robust and healthy, in his childhood Richard Proctor was thought to be delicate, for which reason he was educated at home by his parents until his eleventh year. In 1848, he was sent to school at a large academy in Milton-on-Thames, where he remained until 1851. In January, 1850, his father died, and the family at once suffered much by reason of a series of suits in chancery, arising out of the mortgaged condition of a large property, of which, had Mr. Proctor lived, he would after a short time have come into possession. The result of the litigation was that Mrs. Proctor and her children were reduced to very narrow cir-

cumstances. Richard accepted a clerkship in the London Joint-Stock Bank, in the summer of 1854, in which position he remained for fully a year, employing, however, every spare moment in studying mathematics. In the fall of 1855, Mrs. Proctor inherited an estate from her husband's half-brother, and Richard was enabled to enter his name as a student at King's College, London. This was in October, and at the following Christmas Examinations, young Proctor, then only eighteen, stood first in *all* his classes. After barely a year's study at King's College, he joined his elder brother at St. John's College, Cambridge, shortly after which his mother died, on account of which he seems to have lost ambition for scholastic distinction. In January, 1860, he graduated, and soon afterward married. In 1863 the death of his first-born seems to have driven him to study mathematics again, and then astronomy. The first result of his new labors appeared in the form of a paper on "Double Stars," published in the December number of the "Cornhill Magazine" for 1863, and in 1864 he began a series of investigations in regard to the great Ringed Planet of the Solar System, the fruits of which were embodied in his treatise on "Saturn and his System." Out of his mapping labors in preparing this book grew his "Economic Star Atlas," which, in turn, suggested his "Handbook of the Stars." This last volume was published in 1866, and in the financial crisis of that year Mr. Proctor lost his entire fortune. Having a large family, he did what so many have done under similar circumstances—went to London to seek his fortune. There he visited the various publishers, with the view to disposing of certain scientific treatises which he had written; but for three years he sought their aid in vain. But Proctor was not the man to allow himself to be utterly disheartened. He persisted in writing; and if he could not get a publisher to issue his books, he could, and did, get his essays published in one or two leading magazines.

In 1866 he was elected a member of the Royal Astronomical Society; and in 1868 he obtained a seat in its Council, which he re-

signed in 1869, but resumed in 1871. Last year he was chosen one of its Honorary Secretaries, a position to which he was again elected at the last general meeting of the Association a few months since. He is also an Honorary Member of King's College, and corresponding member of several foreign scientific societies. Meanwhile he was bringing out his books in rapid succession. In 1867 appeared his "Constellation Seasons," "Sun Views of the Earth," and "Charts of Mars," "Planetary Orbits," etc. In 1868 he issued "Half Hours with the Telescope," followed in 1869 by "Half Hours with the Stars;" and in 1870 his singularly able and original volume "Other Worlds than Ours," was published by the Messrs. Longman, of London, and met with an extraordinary success. During the same year, 1870, he produced his "Large Star Atlas," followed twelve months afterward by his volume on "The Sun," his admirably arranged and well compacted "Elementary Astronomy," as well as the first series of "Light Science for Leisure Hours." Last year he published five books—"Essays on Astronomy," "School Atlas of Astronomy," "Orbs Around us," "Elementary and Physical Geography," and "Chart of 324,000 Stars." During the present year has appeared the second series of "Light Science for Leisure Hours," and at the present moment, we believe, he is preparing for publication a volume on the Transit of Venus, and has in press one bearing the attractive title of "The Borderland of Science." From this brief *resumé* of his labors it will be seen how much valuable and lasting work Mr. Proctor has contrived to crowd into a few years.

Mr. Proctor's opinion of scientific men, as declared in a brief address made shortly after his arrival in New York, is far from imputing that superficiality to them which many thinkers would have us believe is the prevalent characteristic of American educational systems. He stated that the people of America were really in advance of Europe in the general attention given by them to science.

He had been amazed by the character of the audiences before whom he had lectured, not solely by their number, though that had surprised him, but by their close attention to the facts presented to them, and by their appreciation of the bearing of those facts. He

had visited also American colleges and other institutions, and had been struck by the great advantages which the methods there employed possessed over those adopted in England.

The difference between the mind brought by the American to the consideration of scientific data, and the mind of the English student, was somewhat marked. For instance, as he proceeded to say, in America men of science recognize authority as a form of scientific evidence, because the fact that a great thinker has held such and such a view, is *pro tanto* evidence in favor of the justice of the view. But Americans refuse to allow authority to decide scientific questions; and when newly discovered facts show that views firmly held by great authorities should be modified or abandoned, the American student of science is not prevented by undue respect for authority from accepting the new truths thus indicated. In this respect, he had himself thought and acted as an American would. His so doing had, he feared, proved displeasing to many in England, who preferred to stand on the old ways. Even more unpleasant to many had been his opposition to the old-fashioned notion that only the official astronomer can do effective work, either in observation or in the discussion of observations. He mentioned how the Astronomer Royal of England had embodied this feeling in the opening sentences of a well-known work on popular astronomy, where he divided astronomical students into those who are "officially connected with Government observatories, and those who are not." Mr. Hind had once rebuked him (Mr. Proctor) for quoting an observation made by an amateur astronomer, not that Mr. Hind denied that the particular fact had been noted, but because the gentleman who had made the observation had not made for himself a great scientific name. This, Mr. Proctor remarked, appeared to him a most mischievous mistake; and he believed that science in any country would never make such progress as it might so long as considerations such as this were allowed to operate.

Mr. Proctor is now engaged in giving a series of lectures on the Solar System and Planetary Phenomena, which thus far have elicited the warmest approval.

BRAIN AND THOUGHT.—Dr. Büchner, in one of his lectures, says that when persons asked Pythagoras for permission to become his pupils he first examined their heads to see if they were properly constructed to understand his doctrines, and Plato acted in a similar way. In the sixteenth and seventeenth centuries attempts to establish a scientific basis for this belief were made, notably by Dr. Thomas Willis, who, in his "Anatomy

of the Brain," first undertook to show it to be a congeries of organs and the seat of the intellectual and moral faculties. Metaphysical and theological philosophers had previously held that there was a soul which was intelligent and sensitive, and entirely different from and independent of the body, and similar doctrines were held by Descartes, Kant, and others. This doctrine has the prestige of age, and is Spiritualism.

VICE AND CRIME: THEIR CAUSES AND CURE—No. 1.

SCIENCE AND SCIENTIFIC METHODS.

IN all ages of the world men have had great confidence in facts. Indeed, science bases all human knowledge on the facts of human experience. "No man knows or can know more than the facts of his experience teach him," said the great Lord Bacon, the founder of the scientific philosophy.

But it nevertheless is true that facts alone do not constitute useful knowledge. Experience, unless it is verified by sound reasoning, and found to be in accordance with the laws of nature, is never trustworthy. It may, indeed, teach either truth or falsehood, and whether truth or falsehood, depends entirely on the way we interpret it. Indeed, a false interpretation, and consequent misapplication of facts, is the great, if not only, error of all time. The opium-eater, liquor-drinker, tobacco-user, the indulger of every bad habit settles the propriety of his course on his experience, and how disastrous the results of that experience is, is well known to every observant and reflective mind. In the early ages of the world's history man had no lack of either experience or facts; but how crude and erroneous were the notions generalized therefrom! The earth was beneath his feet as the center of the universe; the firmament was over his head as the roof to his tent; the greater light was to rule the day and the lesser light to rule the night; millions of twinkling stars studded the firmament like so many gems in the roof of his cave; the winds blew and the rains fell, the grass grew and the mighty forests sprang forth—ten million times ten million facts were presented to his view, but he comprehended them not. To him this whole world was one grand system

of contradictions and inconsistencies, without order or reason, and subject only to the whims of the gods.

The facts of experience are undoubtedly the basis of all knowledge, but they do not alone constitute useful knowledge. They are but the alphabet of it, the first step toward its attainment. Having learned the alphabet, we must correctly form it into words, and the words into sentences, and the sentences into paragraphs, before we can thus receive or communicate knowledge; just so the facts of life must be aggregated and generalized into principles before we can comprehend the truths of nature. The facts of mathematics have existed in nature from all eternity, but until the principles thereof were understood, they were of little use to man. The power of the lever was exerted for ages before Archimedes was born, and the facts of its employment in nature undoubtedly observed, but until he had discovered and shown the principle of it, it was comparatively valueless to man. But once we have arrived at a principle, we have attained to knowledge of incalculable value; and for the reason that principles are universal in their application and unerring in their results. Principles always apply where the conditions are supplied. There are no exceptions to nature's laws. The principles of life are as unerring and infallible as the Creator who established them. Facts are the fulcrums on which to rest our levers, but principles are the levers that move the world.

And it is this unerring certainty of principles that makes science what it is. If laws were changeable there could be no science; if principles were not absolutely reliable, we

could have no certain rule of action. Science is simply an orderly arrangement of principles into a system. It is knowledge systematized, the science of a thing being a systematic exposition of the laws that govern that thing.

And principles are cumulative in their power just as we come to understand and apply them. The limit of their usefulness has never been found. The sciences of mathematics and mechanics, even in their crudest states, were extremely valuable, but as they have been further studied and applied, what wondrous results have been achieved! One discovery has always been the stepping-stone to another. It was mathematics that made mechanics and all the other sciences possible. The discovery of the power of steam and the steam-engine necessarily preceded the railway and the steamship. Were it not for the discoveries of Galvani, Volta, Franklin, the electric telegraph and ocean cables would be impossible.

And so the world moves. Since the time when our forefathers first tasted of the sweets of knowledge, the appetite for the same fruit still continues, and human progress, slow at first, has been steadily increasing. Each new discovery in science or art opens up the way for others, which naturally follow. All truth is exact and unvarying. The principles of scientific investigation are absolute, and applicable to all subjects. Within the range of human observation and experiment the truth must be discovered if we will apply the appropriate tests. Given this, we can surely find that; having discovered this principle, we can verify that law; comprehending this rule, we may predicate that result; and so if we will faithfully adhere to the known principles of nature in all our investigations after the unknown, our knowledge will finally be limited only by our capacities to perceive and reflect.

But here is the great difficulty. Mankind, as a rule, steadily refuses to apply unflinchingly the known principles of nature to the discovery of new truth, or even to admit their applicability. They are unable to comprehend in all its length and breadth the magnitude of a principle. So few there are who can trace it in all its ramifications, and behold it in all its bearings, that society, as a

whole, never takes an advanced step until driven to it by the inherent force of the truth after it has been demonstrated as clearly as the existence of the sun; and even then, to the disgrace of human nature must it be said, there are so many prejudices to be overcome, so many selfish interests to be satisfied, so many pet delusions, that are sure to be hurt, if not demolished, that it is impossible to make an advance except in the face of the most galling opposition, usually amounting to social ostracism. Even in such material improvements as labor-saving machinery the same spirit has been shown, until men have at length ceased from very shame longer to denounce a steam-engine as the invention of the devil.

Nevertheless, great progress has been made. For over three hundred years scientists have been unwearied in their researches. New laws have been discovered and new forces utilized, and the results thereof have been so evidently valuable, that the spirit of persecution, though not by any means dead, is nevertheless greatly discredited; so that in the physical sciences, at least, men are allowed to invent, discover, and apply freely the principles of nature to the improvement of human conditions. Hence invention has become marvelous in its results not less than in its activity; and physical science has reached a point of realization that far outstrips the wildest dreamings of the wildest imaginations that the past has produced.

To recapitulate the wonders of science would be to waste time; suffice it to say that in every department of science, save in the department of man's own nature, we have reached marvelous exactitude and precision. The scientist has both proved himself the prophet of nature and the administrator of her resources. He weighs the worlds, predicts their conjunctions, and describes their revolutions. He measures the tides and stores up their forces for his own uses; turns water into light, the air into heat, and makes the lightning the medium for transmitting intelligence to the uttermost ends of the world.

All these things result from the application of the principles of nature to the production of desired results.

We ask now for an extension of this priv

ilege. We pray not for opportunity to advocate some revolution in the modes of human government; we desire not now to enter upon any experimental reforms; but we do crave the privilege of applying unflinchingly the known and acknowledged principles of human life to the discovery of the causes and means of prevention of human suffering. That this is not now done seems evident. If the scientific methods of investigation had been applied to man, and to the improvement of his personal conditions, the results would speak for themselves. "A good tree bringeth forth not bad fruit." Scientific knowledge could not have permitted such results to society as we behold to-day if it had been applied. Look at man in the physical departments of his nature. The facts are astounding to contemplate. One-half the human race drop into premature graves before they reach twenty years of age. One-half the children in our cities die before they reach five years of age. Sickness and premature death are almost as familiar as the garments we wear or the food we eat, while natural death—death by old age—is a dream of Utopia. Pestilence, famine, and war combined make no such havoc of human life as does this fell destroyer. For four long years powder and ball, bayonet and lance, were used in this country with all the effectiveness that two contending armies of a million each, organized and equipped for the very purposes of human destruction, could devise, and humanity stood aghast at the slaughter; and yet it did not equal the destructiveness of disease. Parents and children, mothers and wives have mourned over the sad havoc of those weapons of war, but it did not equal that which is needlessly going on around us all the time. But we have become so used to it that we accept it as a matter of destiny. The tolling bells lull us to sleep with the oft-repeated monotone that it is the will of Providence, than which a more wicked and disastrous falsehood never was uttered.

The broad interpretation of these facts is, that the principles of science are not generally applied either to the prevention or cure of human physical ailments. The results are not the results of science. The impotence of the present systems of effort to relieve human suffering is the impotence of ignorance, not

the power of knowledge. Unintelligent or inappropriate application of means is at the bottom of the dire evils that afflict us. Knowledge would give us power, and power would give us that most sought-for boon, happiness. To the extent that we lack this do we prove conclusively our own ignorance.

If further testimony were needed on this point, we have it in the utter want of definite principles both in the treatment of sick people and in the prevention of sickness. In the latter, no pretense is made toward system, while in the former, according to the acknowledgments of medical men, the system is founded upon conjecture, reared upon assumption, established often upon "false facts," and is sustained by experience that never attains to the dignity of an experiment. But this subject we have already discussed in a series of articles in the *Science of Health* for 1873, under the head of "Disease and its Treatment," and we will therefore pass to the other department of human science, and consider man in his mental, moral, and social relations.

And lo! what a state of affairs we behold! Look at society as it at present exists. Examine into its political ethics, its business morality, its social conditions. Read the history and marvelous developments of "Credit Mobilier," and all the lesser sins of our national legislation; think of the political associations and rulings of our great cities and greater States; watch the compounding of felonies by great men, the stoic indifference and sublime impudence of defaulting cashiers; the thirst for gold and the thirst for fame; the passions and strifes of parties and sects; the lying injustice of the one, and the oppressive bigotry of the other.

And, socially, what depths of wretchedness even proud respectability has reached! Whose closet does not contain its skeleton? Whose life is free from social jealousies and animosities? Many, we trust, but how many let the interminable revelations of divorce courts and the horrifying details of family brawls suggest. Husbands are unfaithful to wives, wives unfaithful to husbands, and children unfaithful to both. Where love once reigned, lust has taken its place, and infidelity, sorrow, and misery untold inevitably follows.

Examine into prostitution. Number these dens of infamy—infamous because of those who support them much more than because of the victims. Note that some of our Legislatures have licensed them, and that respectable newspapers call for an extension of the license system.

Then read in characters not to be mistaken the state of society as shown in our prisons and penitentiaries. Here we will find stubborn facts, and very unpleasant facts—facts that we would gladly dispense with, but

which, like Banquo's ghost, will not down at our bidding. On every hand we must perceive the unmistakable evidence of failure, *continuous failure*, both in the prevention and cure of vice and crime, and the question naturally recurs, Why? Are we unsuccessful from excess of knowledge or from want of knowledge? Surely a little science on these important questions would now be in order; for not less surely has vain speculation contributed chiefly to our present condition.

ROBERT WALTER, M.D.

Department of Ethnology.

True Christianity will gain by every step which is made in the knowledge of man.—*Spurzheim.*

ARCHÆOLOGY IN AMERICA.

THE MOUND BUILDERS.

BY A. L. RAWSON, A.M.

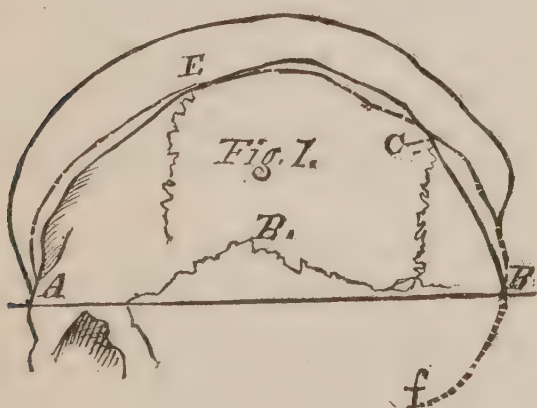
SCATTERED throughout the most habitable regions of this hemisphere there are a vast number of relics of a pre-historic and civilized people. These are their bones in monumental and sepulchral mounds, works for public and religious uses, tools, utensils and ornaments of stone, bone, pottery, shell, and copper. Some of the bones were found associated with those of extinct animals, whose geological age is very remote; and one specimen was recovered from a bed where it had been deposited in what is called the pliocene epoch, and another from the drift-period, ages too far back for our ordinary comprehension, and only to be stated in terms of thousands of years, the least of

its tributaries, along the shores of other rivers leading into the Gulf of Mexico, throughout Texas, in Arizona, Colorado, California, along the Atlantic coast, on the range of the Alleghanies, and a few on the shores of Lake Superior. There are also some in the Red River Valley, in the Dominion of Canada.

In Mexico there are relics of the primitive race in almost every section, one of which, the great pyramid of Cholula, has a base four times that of the great pyramid in Egypt, and is nearly half its height; and in Central America the indications that the same race carried their civilization to its culmination there, after which it decayed or was destroyed by invaders.

The ruins of Central America are scarcely excelled in magnificence by those of Egypt, Assyria, or India.

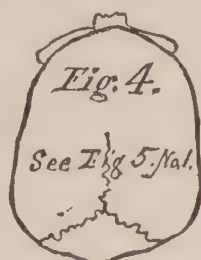
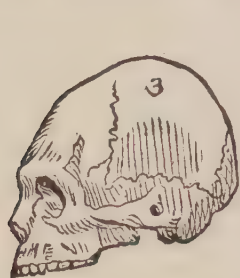
In South America the works were once described as "princely palaces built of hewn stone," aqueducts of costly structure, and roads paved with pounded stone (macadamized), one main line being traceable and in good order in many districts, extending more than a thousand miles.



which is said to have been thirty, and the highest fifty.

The relics in the United States are found in all the valleys drained by the Mississippi and

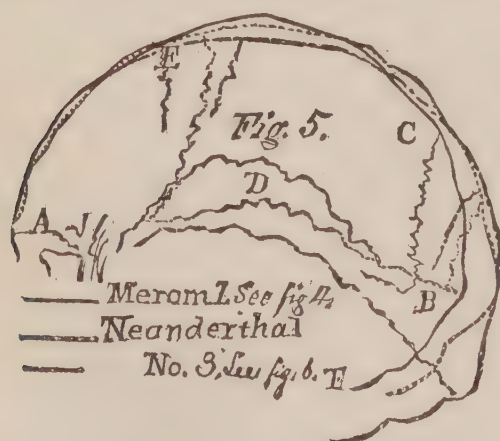
There is a large number of objects, tools, utensils, and ornaments exhibiting their skill in design and execution, of equal, and in some cases superior, workmanship to those



attributed to the European races in a corresponding age.

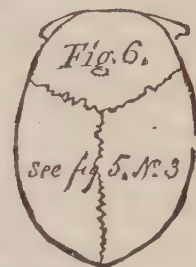
This ancient race was unknown to the eastern world, unless we are to believe that the references to and description of Atlantis by Plato and Plutarch were not mythical, but authentic, as some now maintain. Beyond this vague hint of this western world not a syllable is to be found in any other ancient book. If a history of it was ever extant in the East it has been lost. The very name of the race has faded out, and in its stead they are by common usage called the Mound Builders in the United States, Teocalli Builders in Mexico, Temple and Palace Builders in Central America, and Peruvians in Peru; while those whose remains are found in the caves of Brazil are not named. Vasquez de Coronado visited, in 1540, several ruined cities in Mexico and along the slopes of the Rocky Mountains as far north as Arizona, whose builders were probably of the same age and race.

The early European visitors found here millions of people of a copper or red color, distinct in habits and language, occupying



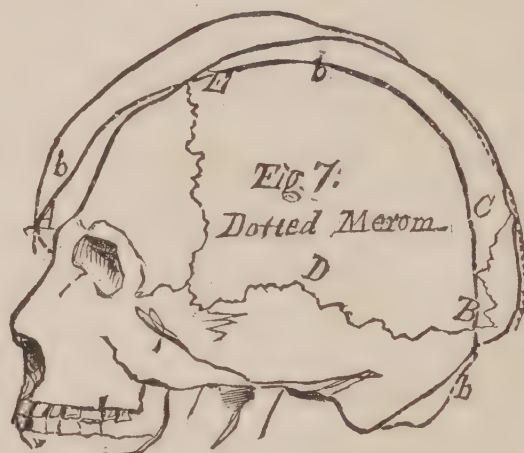
the whole country, but who had no knowledge, nor even a tradition of the mound builders. For three centuries the white race

has been steadily driving out of existence the former occupants of this country, until nearly the whole continent north, and a great part of that south, is completely occupied by them; and the relics of the primitive race are being destroyed with their successors.



There have been many conjectures offered in answer to the question, Who were the Mound Builders? One of the most prominent is that which claimed them as the "lost tribes" of Israel. Their works, language, physiognomy, and anatomy altogether combine to defeat that claim, as will appear in the progress of this paper.

Another improbable conjecture requires an emigration by way of Alaska and Behring's Strait, or a direct navigation of the Pacific from the shores of India; but the answer to

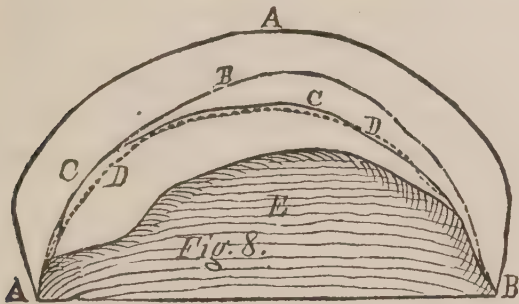


these and all other suppositions as to their origin anywhere off this hemisphere is found in their material remains, which are peculiar to this side of the world. The visit of Eric and his associates and followers in the ninth century is of too recent a date, even if it had been followed by an extensive and permanent colonization, and there are no traces of their visits outside of the Danish books.

It is only possible that in the vast libraries destroyed by the zealous priests during the conquest of Mexico there were accounts of the ancient inhabitants, for the Mexican scribes were learned, and skillful with the pen and brush, as the very few manuscripts saved from the almost universal destruction so amply show.

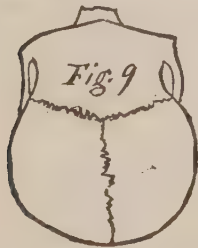
Within the last fifty years the science of

Ethnology has been enriched by a great accumulation of material, and the researches of many men of eminent abilities. Before that time the date assigned by Christians to the creation of the world was about six thousand years, which opinion was supposed to



rest on the accounts of Moses. Since it has been discovered that the interpretation was erroneous, and that the Bible does not fix the chronology of the beginning, scholars have sought for information on the subject in the great book of nature. Some of the most energetic workers in this field have been and are still in high places in the church, who are confident that when science has become familiar to the best men (and perhaps also the masses), it will be found to harmonize with revelation. Since both science and revelation concern the works of the same Creator and Father, there can be no antagonism except through misconception or lack of correct knowledge.

That man existed on the earth during one, if not two, of the latter geological ages is pretty firmly established by material evidence, such as traces of his presence on the spots inhabited by him, tools and weapons in the earliest periods, and utensils, clothing and ornaments, besides other objects, in the later; and, more important than all else, his

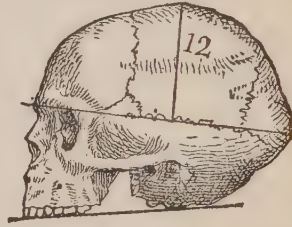


bones, mingled with these other relics, buried in the earth far below the surface, in spots not likely to have been visited by any one of the races now living.

The antiquity of some specimens has been inferred from the strata in which they were found, the enveloping material, its condition,

the amount and kind of deposits lying undisturbed above them, and also by the presence of the bones of animals, known to have existed in a remote past and now extinct, in the same deposits, mingled with the human remains, and which bear the marks of tools used by man in preparing his food. The more recent remains are those buried in the mounds, having such surroundings as serve to establish their date as long before any historical period on this continent.

Nearly every section of the country has yielded something, almost always accidentally; and when systematic searches shall be made, there is no doubt the number of recoveries will be greatly increased. The objects already brought to light have been inspected and pronounced upon by scientists in this country and in Europe, all questions of fraud and error having been very carefully sifted, and the facts published both in transactions of scientific societies and in many volumes in several languages.



The evidence so far is uniform in support of the assumption that there was one, if not several, indigenous races on this continent.

Among the oldest traces of human art and other remains are the chert-flakes, hammers, chisels, knives, and wrought shells in the gravel beds of Colorado and Wyoming territories, which some geologists assign to the Miocene epoch. The next in point of time is the skull found in Calaveras County, California, in the gold drift, 150 feet below the surface, under ten distinct strata, five of gravel, separated by five layers of lava, and capped by a thick crust of tufa undisturbed. This is claimed to be, by many thousand years, the oldest known specimen of human remains in the world, and is dated geologically in the Pliocene epoch. (See figures 17 and 23.)

In the drift period there have been found a polished stone plummet in the San Joaquin Valley, California; a stone hatchet in Jersey County, Illinois; a human bone (innominata)

in the lias near Natchez, with bones of the mastodon and other extinct animals; and chert implements in the Osage and Bourbeuse valleys, Missouri, mingled with the bones of the mastodon and mammoth (*Elephant Americanus*).

From the bone-caves in Brazil have been



recovered human skeletons, associated with the remains of extinct genera and species of quadrupeds; and there have been recovered on the coast of Ecuador pottery, images, and implements, some highly ornamental, even in gold, from a stratum of ancient earth which had been covered with marine deposits six feet deep, and afterward elevated with the whole country to its present position; in Guyaquil the bones of the mastodon and other animals; in the province of Esmeraldas, between the sea-shore and Quito, the six terraces, each succeeding one higher, yielded relics of human occupation; and the degree of skill is comparatively superior to any of primitive times from whatever source.

In the recent period have been found works of art and human remains in connection with the bones of animals, buried under several successive forest growths, as at New Orleans; in the alluvium, as in the Ohio Valley, and in a part of the shell-heaps of the Gulf coast.

The very latest in point of time are those recovered from the mounds in the valleys of



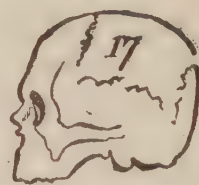
the Ohio and Mississippi, and in a part of the shell-heaps near the Gulf coast, and inland along the principal rivers and bayous. Space forbids entering into the details of these various discoveries, as our present inquiry does not include the consideration of

the validity or genuineness of the objects, but what they mean, and what we can learn from them concerning their authors.

One of the most valuable guides in tracing ethnic relations is the form of the skull. Those of the American races are peculiar to this continent in all their relations, physical, moral and intellectual. There is no shadow of a link with the Old World, and the races stand by themselves, through all the endless varieties of nations and tribes, as distinct from all others.

There are three varieties of skulls which are described as long heads (*dolicocephali*) (fig. 11), medium heads (*orthocephali*) (figs. 17 and 23), and short heads (*brachycephali*) (fig. 15).

The long heads in our day are found among the Caribs, and on the eastern shores of the continents, from Canada to Uruguay. The short heads are found on the west coast of the continents from Behring's Strait to



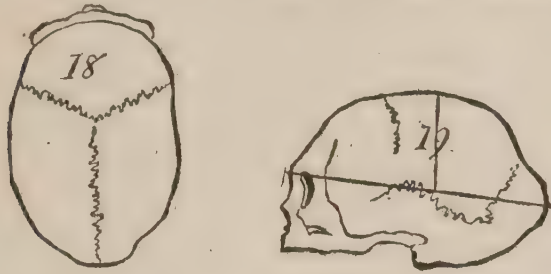
Patagonia. The Peruvians were exceptions in this geographical distribution, having had long heads and lived on the west side of the continent. The most noted long heads of North America now living are the Algonkins, Irikois, and Cherokees. A very marked specimen (figures 18, 19) was found in an ancient mound in Scotland.

The Aztecs were short heads in a remarkable degree (fig. 17); and there were some Peruvians, as figured by Morton, of the same type. In the North the nations most noted of this type are the Natchez, Chetimanchees, Creeks, Seminoles (fig. 15), Osages, and Menomonees. The skulls from the mounds in Ohio, West Virginia, and Tennessee are of this type (figs. 11, 12).

Figure 1 presents an outline of a skull of a mound builder from near Chicago, compared with a European (outer line) and an Australian (broken line), the highest and the lowest known forms of the human race. (See the Eskimo (figs. 20, 21), compared with the poet Schiller. (Dotted line.)

The points most noticeable in this cranium

are the low development of both the front and back lobes as indicated at E and C. This form of skull, so raised at the apex, has been said to suggest a likeness to the Gothic arch (fig. 21). The line from f to B is very



oblique. The suture uniting the squamous with the parietal bone tends toward a straight line. The nasal bones project beyond the outline of the skull.

Length, A to B, 7.6 inches; height, 3.8; width, 5.75. (See figs. 1 and 4). The class to which it belongs is the medium heads (orthocephalic). Its brain capacity is about equal to that of the Borreby skull (fig. 3), found in Denmark, Europe, and assigned by Huxley to the Stone Age. (See figs. 11 and 12 for variety of this form of skull.)

The skull found at Neanderthal, Germany, has a much greater projection of the superciliary ridges; is long, narrow, with very thick walls. It is believed by some to have held a brain more limited than the lowest negroes of our day, while others recognize the characteristics of the modern Celt, with the requisite faculties. (See fig. 5, the dotted line.)

Fig. 2 is from a frontal bone, the only part not decayed when found in Kennicott mound, near Chicago. The forehead is low, flat, and has such a character on its thick bony wall as a prize-fighter would envy. This type is repeated in many of the crania of the short heads, both primitive and modern.



In fig. 7 there are contrasted the outline of a Flathead Red man, with that of a mound builder from Merom (dotted line), and of one from Tennessee. Figs. 9 and 10 are of a supposed mound builder from the French Broad River, Tennessee. It is very

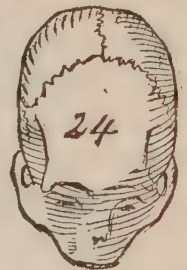
wide and very high, and was probably in life one of a race of mountaineers. The inhabitants of that region at this day are a peculiar people; strong, quick-witted, but with very little inclination to culture. Their manners are primitive and unattractive to strangers, except as a study in ethnology. In a company of twenty persons five will be found to have short heads.

The Cherokees formerly occupied the district, but they had long heads. The skull figured in 9 and 10 was found buried under a mass of clay several inches thick, which bore the finger marks of the friends who packed the soft clay about the form of the dead before building a fire to bake the clay.



The two figs. 11 and 12 are of two specimens from clay cists in Tennessee, and 12 compared with 19, from Scotland, shows a capacity very much in favor of the mound builder.

The forehead in fig. 5 (from Merom) is, like all the others, narrow; the zygomatic bones are prominent, the orbits squarish, and the forehead slopes very rapidly, producing what we consider a deformity. The heads on the monuments and in the manuscripts were supposed to have been caricatures before the discovery of the crania, although they represented the king, high-priest, and others in the most solemn and important occupations. Humboldt was of the opinion that the ancient Peruvians were unacquainted with the means of producing artificial deformity of the skull, such as is practiced among the Flathead Indians in Oregon, the Frog tribe on the Orinoco, and by some remnant of an ancient race in the south of France, as it was among the Swiss Lake dwellers. (See figs. 24, and 34 in next article).



Artificial deformation would not be inherited, as the offspring is rarely in the slightest degree affected by any malformation in the parents, and therefore the instances noticed

by the anatomists, Rivero and Tschudi, of this peculiar formation of the cranium in the fœtus (of Peruvian mummies) settles the question. Low foreheads were then the type.

Fig. 5 presents two profiles from Merom compared with that of the Neanderthal skull (dotted line), of the most ancient cave dwellers of Europe. The differences seem to be very slight, perhaps in favor of the American type.

The intellectual rank of the mound builders can not be determined with any approach to accuracy from the few crania now known. Up to a certain point the development of

the brain may be ascertained from the shape and size of the skull, but besides the questions of shape and size there are quality, activity, and culture, which are all equally necessary in the estimate.

The modern Egyptians (Copts) have crania similar in every respect to those of their ancestors, the pyramid builders; but having lost their leaders, and their opportunity for activity and culture, through slavery to a dominating race, they are servants now where they were once masters, and serve a race who are in every respect their inferiors, except in brute force.

THE INDIAN MEDICINE MAN.

AMONG the North American Indians the functions of prophet, priest, and physician are vested in certain persons termed Medicine Men. Their power over their red brethren is wonderful, and the faith in them is untainted with skepticism. Just as the ancients consulted the mystic oracles before determining upon any important movement, or as the Jews of old inquired through their priests the will of Jehovah, so these children of the plains and the forest inquire of their Medicine Man the will of the Great Spirit.

Will game in abundance reward the hunter? Is this the time to war upon another tribe, and will the warriors return with many scalps to their lodges? Shall they fight or make peace with the pale faces? These, and other questions of varying degrees of importance, are submitted to their seers, and their words decide the issue.

These Medicine Men are educated to their vocation from early childhood by those holding the priestly office. They belong to no particular family or class, but are selected from among the embryo warriors by the shrewd old priests, who watch the lads at their play, note their characters, and never are mistaken in their choice. The boy is trained for his vocation as Eli trained Samuel. He lives with the Medicine Man, he learns the virtues of the various simples he uses in his natural pharmacy, the persons he prepares for his victims, and, in time, the adroit tricks by which he retains his hold upon the superstitious minds of his race. Finally, he

passes through an ordeal of abstinence, physical suffering, and endurance, testing his stoicism to the utmost, and these with some rude ceremonial he is inducted to the priestly office, and exercises in after years the arbitrary powers of his order. This is a general truth, describing the fact as it exists among all the tribes of the West on either side of the Rocky Mountains. Beyond this, however, nearly every tribe has some ceremony peculiar to itself, without which no person could receive their confidence, and exercise the Medicine Man's power.

Among many tribes on the Pacific Coast these priests are divided into three classes, the good, the bad, and the mixed. The first draws his inspiration from the Great Spirit alone; the second has dealings with the numerous spirits of evil; and the last is under the protection and wields the power of both.

The second is most feared, the last most respected, while the first is called upon only when medical treatment is required. The vocation of the second class is by no means desirable, for while it brings much wealth with it, it is also full of danger. Many of these men have been killed by the relatives of some deceased patient because the doctor allowed his "evil eye" to work mischief upon one he should have healed. This species of vendetta is legalized by usage and upheld in a great many tribes. Were it practiced in civilization, the human race might escape many ills and be longer lived than at present.

Who knows? This custom brings to mind another growing out of it. If a Medicine Man who has been so unfortunate as to outlive a patient, finds that the latter's relatives have determined upon his death, he has a remedy at hand as safe for him as the Cities of Refuge were for the Hebrew murderers.

He has but to communicate with the chief of the band to which the mourners belong that he is ready to atone to them for their loss. The chief calls together all his people to consider the subject. The man's life value is computed (not by "standard" insurance tables) in a fashion perfectly satisfactory to the parties, and the number of blankets, ponies, and beads is fixed upon, and the doctor notified. He pays in full, the grieved souls are consoled, and no one thereafter can charge him with crime.

A few years since, one of the tribes located near the Columbia river lost a number of their people of the typhoid fever, within two or three days' time. One of the last to sicken and die was a favorite young man named Charley. About two months before this he had engaged in a rough and tumble fight with a young buck of a neighboring tribe, the son of an "evil eye" doctor, and had whipped him. The next day, the father meeting Charley, told him he would suffer for it. When the fever attacked him, Charley was fifty miles or more from the place of the encounter, but he began calling the name of the doctor, and never ceased until his ravings ended in death. The tribe came at once to the conclusion that all the deaths were caused by the revengeful father, and determined on his death. For once they refused to listen to overtures of compromise, fearing, as they said, that he would destroy their whole tribe.

The friends of the doctor then applied to the Superintendent of Indian Affairs to interfere, and he caused the doctor to be arrested and brought before him for trial. The chief and head men of Charley's tribe, accompanied by many other of his friends, were present as accusers and witnesses. Kil-i-ki-ma-na, the doctor, was a villainous-looking Indian, some sixty years old. His left eye was blind, his long, coarse black hair hung in heavy masses in his neck; he was brawny, muscular, and agile as a panther. He hired a lawyer to plead his cause for him, and the officials sup-

plied the accusers also with counsel. The session of this strange court made a novel and picturesque scene.

The judge, an army officer, was dressed in uniform, and sat at a table covered with a brilliant scarlet blanket. On either side were the lawyers, and in front of them stood the accused, erect, firm, determined, evidently the master of himself and of the situation. Three or four of his friends were near him. The party of his accusers, some thirty or forty in number, filled the rest of the space, while their women (for whom there was no room inside) stood out on the porch and flattened their noses and lips against the windows, which came to the floor. Antoine, the chief, prepared in behalf of his tribe to make the accusation verbally. Here arose a difficulty. Neither tribe understood the language of the other, and very few of them knew the Chinook jargon, the general medium of communication between all the tribes and the whites. Two interpreters were therefore found, and then the business proceeded thus: Antoine made his charges in his own tribal tongue. The interpreter for him converted them into Chinook for the benefit of Kil-i-ki-ma-na's man, and he in turn translated it into his master's language.

While Antoine was talking, the accused turned his one useful eye upon him, and watched him with unwinking attention. This made the speaker very uneasy, he shifted his posture often, and trembled with a fear which was shared by all his tribe. It was evident that to them all "the evil eye" was a reality, and that it would require no little address to remove their superstitious fear of its influence.

When Kil-i-ki-ma-na at last had an opportunity to reply, he did so, with an earnestness and eloquence that would have been creditable to orators in high stations of civilized life. His argument was dignified, adroit, and impressive, even when filtered through the sieve of the Chinook jargon into plain English. The legal gentlemen then exchanged a few words with the Colonel (acting as judge), and the latter decided that there was no proof of any bad conduct on the part of the accused, but that contrary-wise it was evident that Charley and the others had died of the same disease as some of their

white neighbors. He therefore ordered him (the prisoner) to abandon the profession of a power which he had there acknowledged he did not possess, and to authorize his followers also to state to all his people what he had confessed that day. Antoine and his tribe were told the folly of such a faith, and were finally induced to shake hands and vow amity with the man whom they had prepared to murder. The attorney for the defense was rewarded for his services with two Indian ponies, a novel but rather valuable fee.

The only malcontents were the women. Had Jefferson Davis been there "his great heart" would have been filled with admiration at the vehemence with which they refused to be "reconstructed," and "his eloquent lips" would have flowed with panegyrics, similar to those he poured out recently at the White Sulphur Springs.

An idea has prevailed among Americans that the Indians were skilled in the cure of diseases. So general was (and is) this belief, that it has made the fortunes of numerous quacks, and will probably remain a popular fallacy for many years to come. Our constipated people buy somebody's "Indian vegetable" pills, look at the picture of the warrior on the box, swallow the contents, and feel a calm conviction that they have been wise in their generation, and saved a doctor's bill. The hair tonics, bitters, syrups, and other nostrums that have been carried into popular favor on the strength of the Indian virtues they contained would make a long catalogue. Yet the idea is one of the greatest humbugs of the age.

All Indians believe in steam or hot air remedies, and use them for colds and fevers. A half-dozen barks, herbs, and roots are made into teas for various complaints; beyond these things they know nothing of medicine. Children of nature, they cling to Mother Earth when they get ill, and depend on sun, air, and water to cure them. Where they have no intercourse with the whites, old age and ophthalmia are their only diseases. Where brought in contact with the pale faces, they acquire their complaints, and seek our medicine men for their relief. The Indians are some of the best patrons that the druggist finds in frontier towns.

The greatest barriers to the civilization of

any given tribe are found in its Medicine Men and squaws. Convert the first, and the last will soon become disciples, for the copper-faced women of the plains are not one whit behind their white sisters in their veneration for the profession. We commend this last suggestion to the very worthy and excellent men who constitute the Indian Commission.

THE GREAT PYRAMID.

IT was 300 years B. .c when the Greeks commenced their proverb about the seven wonders of the world, and named the pyramids first. It (the largest of them) has four sides which face the four cardinal points of the compass with more exactness than can be determined by the compass itself without the aid of calculation. It is built of dressed and systematically adjusted limestone, and some of the stones were carried from quarries 500 miles distant. It consists of 70,000,000 cubic feet of masonry. It covers more than twelve acres. It is a perfect square at its base, has four equal sides, and has but one narrow passage which pierces it on the north side directly on the meridian. The opening runs at an angle pointing outward to the then Polar Star. It was built 2170 B. c., and only then the Pleiades and the then Polar Star were, at midnight, in October, exactly opposite each other, and both were on the meridian. Sir John Herschel, thirty years ago, thus fixed upon the date of the pyramid as embodied, unmistakably in itself. The same configuration of the heavens can not recur, from that time, for 25,868 years. At the rate of one inch for a year the number of years in the whole processional cycle is built in the sum of the two diagonals of the base. Its height is to twice its breadth as the diameter to the circumference of the circle, and thus it stands in its whole shape a type and memorial of a squaring of the circle, performed ages and ages before the question was ever heard of, among the schools of philosophy or the written records of mathematical investigation. A hebdomadal system also appears in this greatest of human structures. The astronomical intelligence embodied in this great pyramid is equally wonderful. It is not only oriented, as above stated, but each side of its base measures 365

cubits, the number of days in the year, with a slight addition in each, which together make up for the nearly six hours additional which in the four years require one day to be added, as in "leap year." The height of the pyramid multiplied by 10 to the 9th power gives the distance from the earth to the sun, almost precisely as most recently calculated,

in miles, and most probably with greater accuracy than our modern science, which still labors under some uncertainty in regard to this point. Its chief chamber is so arranged as to give the mean temperature of the whole surface of the habitable globe: 68° Fahrenheit. Many other wonderful things are recorded about it, which can not be mere coincidences, but are unmistakable evidences of real scientific knowledge.

Our Country and Its Resources.

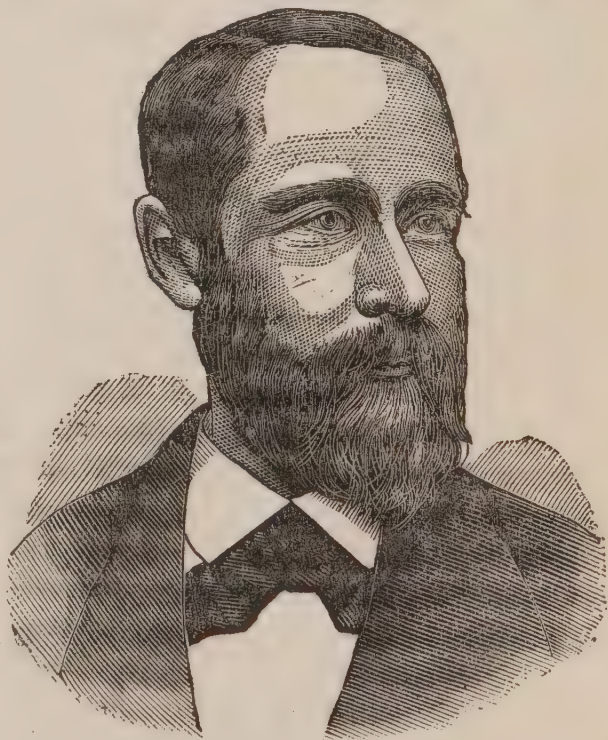
That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

HOOSAC TUNNEL.—No. 2.

AN UNUSUAL THANKSGIVING.

I RETURNED from the church, and taking some lunch, leaving the supper to be eaten by my family and friends, was soon called upon by Mr. E. Stowel (inspector), who took me down to the office near the west portal, and there loaned me rubber boots and a rubber overcoat. He also placed in my hand a tin cup with a long nozzle and a large wick for burning whale oil, and then, having accoutered himself, we clambered down to the opening. The entrance is covered with boarding, to keep out the cold and prevent draught. Pushing the door open we were soon within, when my conductor lighted the lamps and showed me how to hold mine. We began to tramp, I following my guide. What an echo to our steps and words! We soon reached the point where there was no ray of light, save from our lamps. I feared that the water dripping from above would extinguish them, but they held out wonderfully. Mr. Stowel "took oil in his vessel" to replenish ours and other lamps. There was a narrow track which had accommodated the cars, and a contemptible little wheezy engine that had heretofore run on the rails. Here and there a spring of water gushes from the sides. How wonderful is the circulation of water underground, and through strata of rocks! There is a tremendous spring now buzzing toward us against the boards set up to break the jet. They can always supply engines with water in the tunnel. The brook whirls along in its artificial channel, but we know too much to step into that. We splash

through some wet places, however, and have to mind that we do not run against some stray rock left where it happened to drop, or some huge implement not picked up. "What means that thundering?" "It is the kicking of mules in the barn." A barn in the tunnel! So it is, and we have got to it. Here, too, or near by, is the cage of the west shaft, just



BENJAMIN D. FROST
(Chief Engineer of Hoosac Tunnel).

come down full of animated clay, going eastward with us. Others have come on behind us from the portal. We press along. We rise up on a "bench;" *i. e.*, where the rock has been blown away from above, and not down to the grade. It is pretty rough walk-

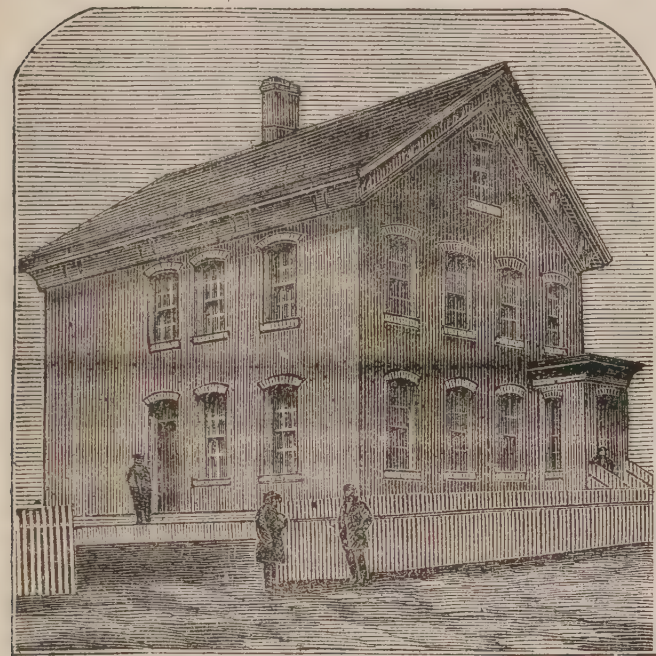
ing, our caps come close to the top, and loose, heavy stones are lying alongside of the path. It begins to grow warmer, and we loosen our outer garments. The day was cold, and it was snowing outside. Down in the everlasting mountain it is always summer, or, rather, temperate—a little colder in winter than in summer, but not much. The mean temperature away from the portals is about 65°. We are now off the bench, see lights ahead, and soon an array of them. "Halt! Halt! Stop! Stop!" shout, yell, and scream a hundred men, dressed like ourselves, seated on the south side of the tunnel. "They are going to fire." We had regard to the imperative mood, and did stop. I sat down also. A neighbor put some cotton in my ears, and I pulled my cap down over them, turned up the collar of my coat, and my back to the blast, while there were not a few men between me and that. Knowing folks said my lamp would be blown out. "I would see." There was a final alarm; presently a terrible, sudden, spiteful bend, crack, tremble, roar—the roar rolling on less and less hoarsely, while all became darkness. Every lamp was instantly extinguished by the awful concussion. The tin tubes were soon lighted, and we crowding on to see what had been done. But we are in the smoke—a thick, sickening smoke. Some begin to have a headache, and to be sick at the stomach. I feel "queer." There is another bench to be surmounted, and on that the smoke is worse than before. The lamps are almost useless, so dense is the glycerine smoke. A report is handed along that there is no aperture yet, and some of us turn back. Mr. Stowel shouts my name. "Back, the smoke is clearing, there is a hole through!" "Hurrah!" We, chattering, holding hands to mouths sometimes, emerge beyond the bench, find better air and a large company. Mr. Walter Shanley, massive, grand, is in the midst. Alleluiah! They have come through from the east! Now we go up and pass through an opening, three feet wide, five feet high. People are going, returning, shaking hands, congratulating, picking up pieces of rock, smiling, laughing, "cackling." In preparing for the blast one hole had been drilled through. Then other holes had been so drilled as to cut out a tapering piece each side. Through the one

hole, a wire had been passed, and both faces were exploded, at the same instant, by an electrical battery on the east side. The cans had done their work as intended, but the greatest force of the glycerine went westward, breaking down the great precautionary barriers, one stone, weighing about two tons, being hurled 300 feet toward us of the west side. So 170 pounds of tri-nitro-glycerine had broken away the remaining fourteen feet of solid rock, allowing the air, in a tremendous draught, to suck through. The explosion was about 2,000 feet west of central shaft, and at three o'clock, P.M., of November 27th, A.D., 1873, as the reader already understands. The Adams *Transcript* says: "It was expected, of course, that Mr. Shanley would be the first person to pass through the opening, as the privilege of so doing was unquestionably conceded to be his; but as the opening was reached, Mr. Shanley, who still stood at the head of the line, quietly stepped aside and, with his marked courtesy, waived his privilege in favor of Senator Johnson, of Boston, Chairman of the Hoosac Tunnel Committee, who was passed, or almost pressed, through first. Hon. Brownell Granger was the next person to pass through, followed by Mr. Shanley, after whom came the crowd promiscuously. About 200 persons had gathered on the western side of the opening, but were detained there until the greater portion of the surging crowd had passed through.

"There were no formal exercises after the opening had been made, though there was a deal of hearty hand-shaking, and congratulations unlimited. Wheeler's brass band favored the company with some good music at the west shaft, after which the visitors returned to their homes, with the happy consciousness of having witnessed one of the grandest and most important events in the long and eventful history of the Hoosac Tunnel."

H. McMillen, editor of the *Troy Times*, also accompanied Mr. Shanley. Samuel Richards, foreman of the west end blasters, charged the drill holes on this side, upon the memorable occasion; Mr. Hancock on the opposite. Mr. Shanley himself fired the battery. W. H. Phillips, of the *Pittsfield Sun*, was with the west company, and sat close by me at the time of the explosion.

I rode home with Doctor S. E. Hawkes, an aged but active physician of North Adams, who, besides assisting at upward of six thousand births, has been generally useful. He and John Shene swung the sledge, Engineer Edwards holding the drill for the blasting of a piece of stone on the west side of the mountain, and they took the fragment to Boston, and had it placed in the Court House, for the inspection of the legislature. It weighed six hundred pounds, and was at least a *ponderous* argument for the tunnel. Dr. Hawkes raised the first subscription to secure the survey of the new route. He has not yet



ENGINEER'S, OR STATE OFFICE.

been pecuniarily rewarded for his sacrifices, and has suffered some very unjust treatment. Still, his heart rejoiced exceedingly on this occasion. Had George Millard, of North Adams, remained yet in the earthly house, another long and zealous friend of this great transaction would have looked more saintly than he did even in the repose of death.

What further we have to tell might as well be put under heads or lessons.

I. Of God's wisdom and providence. While other routes answered for the business of the country, tunneling was not thought of by the public, and if it had been, it would not have been performed. The power drill (drilling by compressed air) has been a great auxiliary, besides supplying the workmen with fresh breathing material. But the greatest special aid has been from nitro-glycerine. In the opinion of the Shanleys this agency, as fur-

nished them by Professor Mowbray, now a resident of the unique, growing village of North Adams, has shortened the work two years. Now, when one takes time to candidly contemplate all these, and other combinations that might be mentioned, he finds his mind filling with the idea of the existence, the fore-knowledge and kindness of our heavenly Father. And I felt it was almost an oppressive omission, that no word of prayer and thanksgiving sanctified the occasion on this notable Thanksgiving Day. The clergymen present yielded, or one of them, as he should not, to a squeamish modesty, in not making the suggestion that thanks should be formally and devoutly returned to the Almighty, while Mr. Shanley was probably affected in like manner, lest he should seem to be glorifying the work of his own hands by any formal religious service.

II. The beginnings of great achievements may be small and broken. They may excite ridicule and laughter—many predicting they will amount to nothing; and each failure or awkward move leads to new outcries of derision. In the case of the tunnel, the finding of unknown obstacles, like the demoralized rock at the west end, or the rush of water into the central shaft, accidents and casualties increased and emboldened the cry of "fanatical," "absurd." Even the poet, Oliver Wendell Holmes, derisively sang:

"When the first locomotive's wheel
Rolls through the Hoosac Tunnel's bore—
Till then, let bumming blaze away,
And Miller's saints blow up the globe;
But when you see that blessed day,
Then order your ascension robe!"

My dear friend, "that blessed day" *has arrived*. Have *you* ordered "your ascension robe?" But Oliver Wendell Holmes, in his candor and good-nature, is doubtless ready to get up a laugh at his own expense, too happy if thus he can atone for his funny sarcasm. Oh, the persevering few! who inspires them? They rally again and again; they begin to outmatch; they secure, at length, unexpected attention and aid; they finally **SUCCEED**. To show how rapid has been the work more recently, I subjoin the profile on page 95. Between the dotted lines indicating the west end and west shaft is a distance of 7,567½ feet.

Such achievements, it should never be forgotten, usually involve vast labor and expense. There is no just occasion for surprise or complaint over length of years, amount of effort, or immense sums of money. That which is worth much in human progress, costs much; and, fortunately, wages are comparatively high in the United States; therefore, a public work may cost a third more than it would in Austria, France, Switzerland, or Italy. This added expensiveness is surely a matter for common congratulation. I suffix the following interesting table as illustrative of the magnitude of the work:

COMPARATIVE STATEMENT.

SECTIONS.	Contract time for Completion.	Total work required to be done to Jan. 1, '73, by terms of contract.		Amount of work actually done to Jan. 1, 1873.	
		Quantities.	Amount.	Quantities.	Amount.
EAST END SECTION.					
Tunnel Enlargement *	May 1, 1872,	4,500	\$72,000 00	3,915	\$62,365 00
Heading Enlargement *	Aug. 1, 1872,	28,000	252,000 00	28,264	247,371 00
Tunnel Extension *	Feb. 1, 1873,	83,192	915,096 81	85,469	924,440 25
Progress of Heading †	Nov. 1, 1872,	5,335	—	5,991	—
Central Drain with Pipes †	Feb. 10, 1873,	5,428	70,559 83	5,914	39,475 05
CENTRAL SECTION.					
Shaft, Repairing Timber †	When ordered,	583	5,830 00	583	5,247 00
Trimming *	“ “	100	3,300 00	90 $\frac{78}{100}$	2,995 74
Sinking †	May 1, 1870,	447	176,565 00	445	174,811 17
Sinking Sump †	June 1, 1870,	15	5,920 00	83*	2,782 99
Pipes *	June 1, 1870,	1,030	6,180 00	759	2,277 00
Fire-proof Floor and Hatches.	When ordered,	—	2,000 00	—	1,650 00
Tunnel Extension, East *	Sept. 23, 1872,	35,409	495,726 00	9,148	120,264 50
Progress of Heading †	Sept. 23, 1872,	2,220	—	1,563	—
Tunnel Extension, West *	July 1, 1873,	39,262	549,666 89	5,024	69,460 75
Progress of Heading †	July 1, 1873.	2,480	—	345	—
WEST END SECTION.					
Heading Enlargement *	March 1, 1874,	40,632	396,124 12	35,190	341,461 00
Tunnel Extension *	Nov. 1, 1873,	66,990	803,880 00	67,258	795,652 00
Progress of Heading, East †	Nov. 1, 1873,	4,200	—	4,648	—
Brick Work, M.	March 1, 1874,	3,434 $\frac{254}{1000}$	75,553 58	3,539 $\frac{837}{1000}$	77,876 41
Central Drain, with Pipe †	March 1, 1874,	5,382	69,286 61	2,381	20,263 35
Excavation only †	March 1, 1874,	1,138	4,945 50		
Masonry only †	March 1, 1874,	1,138	3,410 82		
Haupt Tunnel Maintenance †	March 1, 1874,	—	5,625 06	—	7,433 00
Total		—	\$3,913,670 22	—	\$2,895,826 21

Considerable remains to be done, in enlarging, trimming, etc. What had been expended before the Shanleys' contract, added to that, with interest, is a large sum. But it is well invested. "And so this great work is assured. When completed, it will constitute the great line connecting the West with Boston, and become the avenue for the movement of produce to the seaboard and Europe. It will be of immense importance to Boston and the State of Massachusetts, increasing their business, cheapening frieght, stimulating the growth of the towns and cities along its track, and opening a perpetual field and market for the ever-expanding industries of that mechanical and manufacturing State. The gigantic mountain barrier which separated the West and the seaboard is conquered, and now the mighty stream of traffic and travel can flow forever over the State to the

sea." But the material advantages of such a work are not the only advantages, perhaps not the chief. The education of the intellect, the vindication of man's dominion, the long ecstasy of a vast triumph, the stimulus and encouragement to the higher powers of the soul, these benefits are beyond all the tabular computations, all statistical margins.

What combinations may be requisite for a vast enterprise? There must be the advocate, the survey, approval, funds, contract, overseeing, banking, and other facilities, book-keeping, hosts of laborers, and so on. These gentlemen I find at the State building, on Summer Street, North Adams:

ENGINEER CORPS OF THE HOOSAC TUNNEL.— Benjamin D. Frost, chief engineer; Austin Bond, clerk and cashier; F. D. Fisher, assistant engineer, west end section; C. O. Wederkinch, do., do., central section; A. W. Locke, do., do., east end section; E. A.

* Cubic yards. † Lineal feet.

Bond, C. B. Heard, F. Flemming, L. E. Blanchard, E. B. Patton, C. Mowry, assistants; E. Stowell, inspector.

And these names I obtained at the Shanleys' office, near the Troy and Boston depot:

Walter Shanley and Francis Shanley, contractors for completion of tunnel; James Stewart, general business manager; W. B. Houghton, paymaster and bookkeeper; Morby Donaldson, draughtsman; Frank Chase, in charge of teamsters, etc.—all in head office; James Hicks, foreman at west shaft; J. J. McGannen, timekeeper at west shaft; John R. Rosbrow, foreman at central shaft; R. R. Peet, timekeeper at central shaft; John Blue, foreman at east end; N. Hoskings,

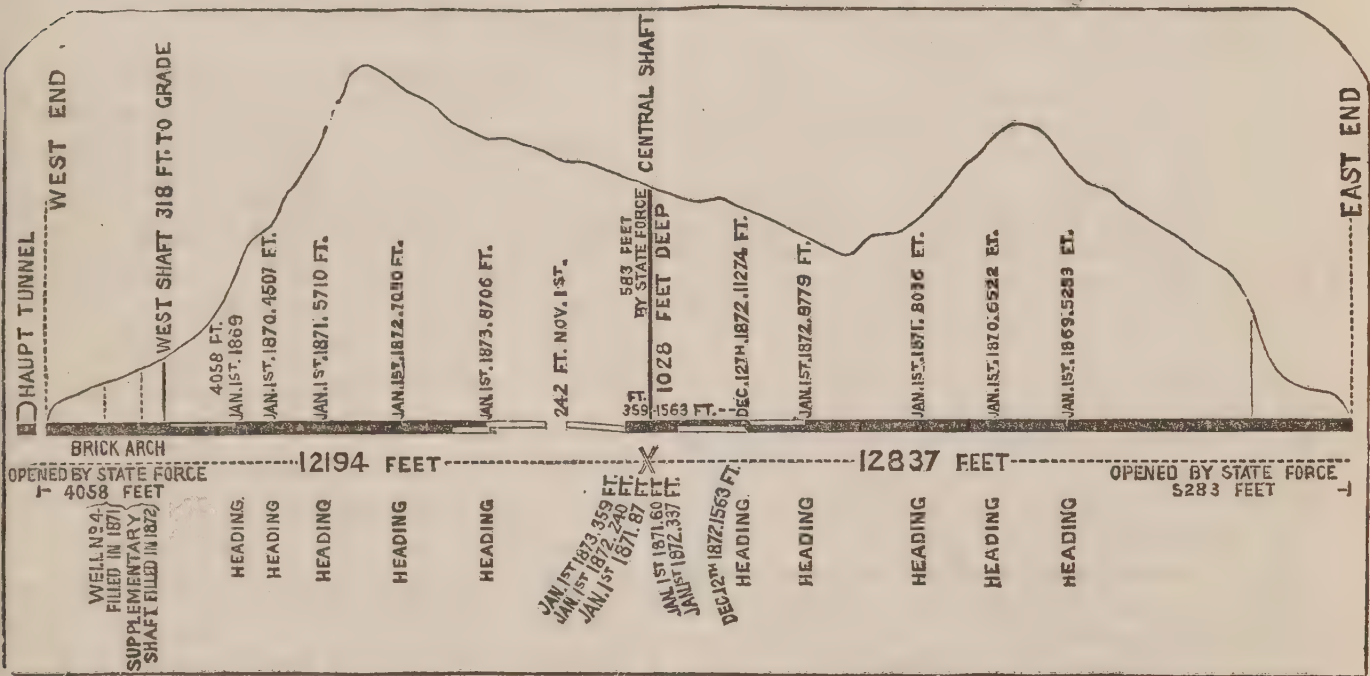
OFFICIAL STATEMENT.

ENGINEER'S OFFICE, HOOSAC TUNNEL, }
NORTH ADAMS, Dec. 1st, 1873. }

At the junction, west of central shaft, made Nov. 27th by blast, at 3.05 P.M., my lines varied by nine-sixteenths of an inch, and levels by one and one-half inches.

BENJ. D. FROST, Chief Engineer.

In addition to the above (which is kindly furnished at our request for the information of the public) we take occasion to quote the remark of Mr. E. S. Philbrick, consulting engineer, an eminent authority on such matters, who was himself present on the occasion of verifying the above results, "that the closeness of the lines was a miracle of engineering accuracy, considering the difficult circumstances surrounding the work." Mr. Frost takes pleasure in acknowledging how largely he has been aided in the attainment of these



PROFILE SHOWING PROGRESS OF THE WORK.

timekeeper at east end; Hocking & Holbrook, sub-contractors for completion of Buck Arch under F. Shanley & Co.; Charles L. Walker, master-mechanic at west shaft; H. W. N. Cole, do., do., at central shaft; Stephen Goodwin, in charge of machine shop at east end; Robert Cillis, foreman blacksmith at west shaft; John Trehwela, do., do., at central shaft; Walter Blue, do., do., at east end.

Number of blacksmiths employed in the division shops about twenty. Number of men employed for the last five years will average quite one thousand. Wonderful accuracy was obtained by the engineer corps, as will be seen by the following statement:

gratifying results by the vigilance, fidelity, and unremitting labor and devotion of his assistant engineers, Messrs. F. D. Fisher and C. O. Wederkinch, and their assistants, Messrs. E. A. Bond, L. E. Blanchard, E. A. Patton, and E. Mowry.—*Hoosac Valley News*, Dec. 3d.

A previous junction, and all the meetings, have revealed the same accuracy, quite in contrast with Mont Cénis.

It was found, when the alignment was obtained at the Hoosac Tunnel, Sunday, that the variation of the line between the central shaft and the west end headings was only nine-sixteenths of an inch. The difference in the line at the meeting of the central shaft and east end headings, last year, was but five-sixteenths of an inch. These are the

greatest engineering triumphs, for work of this kind, ever placed on record, and they will stand as lasting testimonials of the skill, perseverance, and faithfulness of all interested in the marvelous and intricate work, so successfully accomplished. — *Adams Transcript*, Dec. 4th.

ENGINEERING AT THE HOOSAC TUNNEL.— A communication from Consulting State Engineer, Edward S. Philbrick, in the *Boston Advertiser*, develops some interesting facts in relation to the engineering work of the Hoosac Tunnel. He reproduces portions of a report written by one of the engineers upon the Mont Cénis Tunnel, in which the meeting of those headings is thus described: "The two axes met almost exactly; there was barely half a yard error! The level on our side was only 60 centimetres, less than three-quarters of a yard, too high. But after thirteen years of continual work who could even hope for so perfect a result?" The methods used in producing the line at Mont Cénis differed in some important details from the methods pursued at the Hoosac Tunnel, where the processes inaugurated by Thomas Doane have been followed out by his successor, Mr. Frost. The superiority of the American plan is illustrated in a comparison of results. Thus, though the Mont Cénis gallery had advanced 20,000 feet before meeting, their error was half a yard—eighteen inches, or almost an inch for every 1,000 feet advance, while we have found our largest error in line at the points of meeting to be only nine-sixteenths of an inch in an advance of 10,000 feet into the mountain, which is a deviation of less than one-sixteenth of an inch per thousand feet advance, and, therefore, only one-fifteenth of the angular deviation developed at Mont Cénis. But with the great achievement of the Hoosac Tunnel, by which Mr. Wederkinch laid out a horizontal line with such accuracy from the bottom of a shaft over 1,000 feet deep, the Mont Cénis Tunnel can offer no comparison, being without shafts, and, indeed, Mr. Philbrick says, "this achievement is unique, and challenges comparison in its way, so far as I am informed."—*Adams Transcript*, Dec. 11th.

When completed the tunnel will be eighteen feet high in the clear, and twenty-two wide. It is destined for two tracks; some day it may be widened for four. It has been interesting to notice the attention now given to the "great bore" by the press everywhere, and the public generally. Tunnel literature abounds, and is devoured with avidity. The feeling beneath all is one of freedom and exultation.

The Hoosac tunnel is four miles and eighty-four one-hundredths long, being next in

length to the Mont Cénis Tunnel under the Alps, between France and Sardinia, which is some seven and three-fifths miles; the next largest tunnel in the world is the Woodhead tunnel, near Manchester, England, some three miles in length. The work still necessary to completion will be the enlargement of a considerable portion of the tunnel west of the central shaft, and the arching of certain portions of decomposed rock now supported by timber. Two drains must be built. The one from the tunnel summit to the east end will be carried in a drainage pipe two feet below the floor of the tunnel. On the western half of the tunnel will be a two-by-two drain, covered by flagging. The arches for the tunnel entrance are still to be built, tracks laid, and much incidental work to be done. The tunnel will probably not be ready for trains before the latter part of next summer, though it is possible a "jubilee train" may get through on the Fourth of July.—*Adams Transcript*, Dec. 11th.

A NOTABLE BIT OF PROPHECY.

Going back a little for an interesting bit of local history, we find that the meeting which incited the petitioners for this new line was held at North Adams, in October, 1847, when Engineer Edwards reported upon a survey from Greenfield to Troy. Col. Alvah Crocker, of Fitchburg, now Congressman from the Tenth District, presided, and gentlemen were present from all parts of the line from Boston to Troy, the latter place being largely represented. Col. Roger H. Leavitt, of Charlemont, made a prophetic speech, in which he said that nature had planned out the valleys of the Deerfield and the Hoosac, and had left this bluff to test the perseverance and energy of man. He urged that it was on the direct line between Boston and Buffalo, and foretold that it would one day become the great thoroughfare from Liverpool to Pekin, and that the ambassador from the court of St. James to China would pass up the Deerfield valley on his way to Canton!

It was an oft-repeated remark of Dr. Canfield's, pastor of St. Mark Episcopal Church, North Adams, formerly of Brooklyn, N. Y., that the Hoosac Tunnel would be through by four o'clock Thanksgiving Day. The exact time was three o'clock and five minutes.

"The Hoosac tunnel wasn't very popular at one time in its history. When the Legislature was first asked to lend aid to the project, it is related that Capt. Gates, of Richmond, who was at the time a member of the

House, and voted for the loan, was so taken to task for his vote by his constituents, that he finally left town to get away from their rebukes. Judge Bishop used to say that it would be a thousand years before a hole could be got through the Hoosac mountain rocks big enough for a bat to find its way through."

Rev. Dr. Crawford, writing of a formal gathering in the winter of 1852 to celebrate the breaking of ground for the tunnel, says: "I remember the speeches were lively, hopeful, witty, and wise; but with a vein of something like sadness intermingled, as if the feeling of oppression, in view of the magnitude, and perhaps doubtfulness, of the enterprise entered upon, was common to all." How illustrative all these things are of faith on the one side and doubt on the other! Faith hath the victory always. Mr. Stowel told me that when he proposed, in 1866, to discharge the cans by means of an electrical battery, so unbelieving and opposed were the hands that at the first he could only persuade one man to assist him.

NATIVITY OF THE WORKMEN.

Almost every nationality of Europe is represented in the tunnel work. The Shanleys were born in Ireland, and emigrated to Canada. Prof. Mowbray was born in London; he is a graduate of the University of Copenhagen; while Mr. Frost, the engineer-in-chief, is a native of Massachusetts. Among the miners are Cornish Englishmen, Canadian French, while the majority (to make but one more specification) are Irish. Many of the miners live in little houses erected by the State near the places of their toil. Their wives look sturdy, and around them are broods of rugged, promising children, some of them going barefoot all winter. The school-house has been provided, and Roman Catholic households are sure to be visited by their pastor or his assistant. In case of the death of a miner, especially if it be by accident, the funeral is very large. A store is adjacent, and carts and market wagons kindly run up from the village, so that no one on the tunnel grounds may be in want—if he or she have money.

Visitors, male and female, tax the inexhaustible politeness of the presiding geniuses, and add animation to the operations. One

lady, Mrs. R. Rosbrow, wife of the superintendent at central shaft, walked through from the central shaft to the west shaft the day after the memorable blast. Vast piles of *débris* lie out in huge despair, dumbly marking the victory wrought. The State will give any one on earth all the rocks wanted for building purposes with a "welcome." Heavy teams come up with coal, or significant boxed bottles of thunder-making elementals for Mowbray's works. The pipe-iron chimneys let off smoke from immense boilers, and the terrific gasping of the compressors forcing air into the immense receivers goes on incessantly. The compressors are driven by steam, except at the east end, where the famous State dam supplies water-power. Steam-power lifts and lowers the cages, while in the shops here and there repairs are going on day and night by two sets of hands.

You go away, after a visit, musing, if you are "read up" on the tunnel of the weak movement of 1819, and then of the revival of a stronger interest in 1825, Loemmi Baldwin being a central figure. You think of Dr. Hawkes pounding that drill, of the opening of the Western Railroad in 1842, the Fitchburg not long after, the Vermont and Massachusetts in 1846, and that the Troy and Greenfield was chartered as early as 1840. "This last company proposed to build a railroad to and through the mountain, and thence to Williamstown, 'there to connect with any road leading to or near the city of Troy.'" Three and a half millions would be money enough (?) and the time seven years. You recall the petition to the State in 1851, with the accompanying remonstrance; the two favorable statements of engineer Edwards; the testimony of Dr. Hitchcock, the geologist, which remains correct, that the mountain was composed of mica slate; the defeat; the attempt, too, for State aid renewed in 1853; the elaborate reports of legislative committees; the close vote and rejection; the success of the following year; the issuing of bonds and the mortgage of the railroad to secure the State; the contract with E. W. Serrel, 1855; Haupt & Co. and their contracts; the State coming into possession; work under commissioners, Thomas Doane, an able man, chief engineer; the sensible recommendation to send Serrel to Europe

to learn about tunnels; the other sensible recommendation of other commissioners that the State "let out the job;" the work begun on central shaft 1863; hand drilling abandoned 1866; the fearful accident at the central shaft, October, 1867, by which thirteen lives were lost, and Mallory's perilous descent; contracts with Mr. Farrow, also with Drell, Gowan & Co.; and, lastly, with the Shanleys,

and their great and final success. You say, What a history! In all probability, ere another Thanksgiving, twenty or thirty trains a day will be going through the mountain, like shuttles, weaving together the interests of the East and West, yet in no essential sense adverse to other routes, but one more deep artery for the current of human commerce and human progression.*

FISHES, SOUTH AND WEST.

BY WILLIAM CLIFT.

[In our last summer's editorial excursion through Virginia, Iowa, Illinois, Missouri, Kansas, Texas, Colorado, Wyoming, Utah, and Nebraska, observations were made in the fish interest by Mr. Clift, who is thoroughly posted on the question, and who kindly contributes the following to the PHRENOLOGICAL JOURNAL.]

THE first point of interest in fish culture we found at Harper's Ferry, in West Virginia. The fresh-water portions of the Potomac, aside from the anadromous fishes, the shad and herring, had few fish of any special value for food until black bass were introduced, nearly twenty years ago. The black bass of the West and South (*Grystes salmoides*) is found in many places on the Atlantic slope and in the Mississippi Valley. This species is a more comely fish than the *Grystes nigricans* of our northern lakes, and has the same habits and game qualities. Opinions differ about the comparative excellence of the flesh. They are both of good quality, and worthy of cultivation in any water that will sustain them. A Mr. Stabler, a conductor on the Baltimore and Ohio Railroad, has the honor of introducing them to the waters of the Potomac. He caught about twenty pounds of bass in Wheeling Creek, and put them into the locomotive tender's tank, carried them safely to Cumberland, and turned them into the Potomac. They have multiplied abundantly, and are now found in all the tributaries of the Potomac down to the Great Falls. Some two hundred miles of a stream almost barren of good food fishes have been stocked with this fine variety, good for the table and for sport. They are taken more abundantly in the rapids near Harper's Ferry than at other points, and parties here make a business of supplying the market with them, and sending them off

for the stocking of other ponds and streams. They are sometimes taken weighing from six to eight pounds, but the ordinary weight is from one to five pounds. It is not uncommon for one rod to take a hundred pounds in a day. This experiment is of great value, as

* LIST OF DEATHS KEPT BY MR. WALTER SHANLEY, CAUSE, ETC.—The writer is unable now to get a like list of casualties occurring previously to the coming of the Shanleys.

Date.	Divi- sion.	Men's Names.	Cause.
1869.			
June 30,	Cent.,	Michael Johnson,	} Fell out of bucket.
"	"	Richard Reynolds,	
"	"	J. Crase (d. July 2),	
Sept. 13,	"	Patrick Mandable,	Crushed by cross-head.
Sept. 28,	"	Thomas Bray,	Fell from 4th floor.
Oct. 9,	East,	George McDuff,	} Explosion of Glycerine Magazine.
"	"	F. La Montaigne,	
"	"	O. La Montaigne,	
Oct. 4,	West,	— Berryman,	Drowned in brick arch.
Nov. 30,	East,	John Bakie,	Missed Glycerine hole.
1870.			
Oct. 18,	Cent.,	Cornel. Radding,	} Slipping of rope on hoisting drum.
"	"	Wm. James,	
"	"	Matthew Jewell,	
1871.			
Jan. 6,	East.	J. Thibaudau,	Tamping Dualin h.
Jan. 23,	Cent.,	Griffith Jones,	Fell from top to bottom.
March 15,	East.	J. Condel (d. Ap. 3)	Falling roof.
April 21,	"	John Mason,	} Glycerine holes in Enlargement exploded by natural electricity.
"	"	William Dunn,	
"	"	Thomas Reycraft,	
"	"	Fred. Roberts,	Falling rock.
June 24,	"	Paul McDermott,	} Explosion in Heading caused by natural electricity.
August 9,	"	John Ferns,	
"	"	Patrick Shea,	
"	"	A. Kennedy (d. 16),	Missed Powder hole
Oct. 13,	West,	T. Columbus,	
1872.			
Feb. 29,	Cent.,	John McCann,	Missed Glycerine hole.
Sept. 11,	West,	David Whitto,	} 2 charges of Nit. Gl. expd. in heading. Similar to the above. Powder explosion in heading.
"	"	M. Harrington,	
Sept. 21,	"	Peter Stone,	
Oct. 3,	East,	M. Cunningham,	Falling rock.
1873.			
Feb. 11,	East,	J. O'Leary,	Struck by crowbar.
May 28,	West,	John McKeon,	} Explosion of giant powder on train when men were going in on mid-night shift—cause carelessness.
June 30,	East,	Stephen Brown,	
"	"	Timothy Lynch,	
"	"	D. McFadden,	
"	"	Henry Ferns,	
"	"	M. Campbell,	
Sept. 11,	Cent.,	Joseph Richards,	Magazine blown up.
Sept. 16,	East,	Wm. Hickey,	Powder blast.
Dec. 15,	West,	Miles O'Grady,	Falling of rock.

it shows how easily this fish may be introduced into new water, and become an important addition to the food-supply. It is probably better adapted to southern waters than the northern species, though we have no experiments to determine this fact. They have been taken from the James River and naturalized in mill-ponds in the neighborhood of Fredericksburg and Warrenton, Va. In unshaded ponds they are said to grow of a lighter color. Efforts should be made to stock all the lakes and artificial ponds with this valuable fish.

THE SALMONIDÆ.

The only species of the *Salmonidæ* known to exist in Virginia is the *fontinalis*, which is identical with the brook trout of the South. It is not found much in the large rivers that abound in the mountains. These are so sparsely settled, and so protected by extensive forests, that the original stock has never been exterminated. These mountain brooks are fed by springs, and the trout flourishes. There are no saw-mills on many of them, and the breeding-beds have never been disturbed. Artificial breeding has never yet been introduced, but there is little doubt that all the conditions of success are present in the Alleghany region. It is not improbable, too, that the *Salmo solar*, or some of the California species, may yet be introduced to the Virginia rivers, although this fish was not originally found south of the Hudson. The Sacramento salmon flourishes in a region much warmer than Virginia. It is exceedingly desirable that the experiment of introducing this fish should be made, and it probably will be at an early date.

SHAD IN THE OHIO AND ITS TRIBUTARIES.

We found a good deal of interest had been awakened in fish culture at Charleston, the capital of West Virginia, and a movement is contemplated by some of the leading citizens to have Fish Commissioners appointed by the Legislature. It would be an inexpensive thing to introduce shad in the Kenawha, and, by a fish-way at the Falls, they would go up into the Ganley and the New rivers. Shad were planted in the Alleghany River in July, 1872, under the direction of the U. S. Fish Commissioner, and samples of the yearling fish were taken in that stream in the summer of 1873. As the habit of the fish is

to go to sea in the fall, there is every probability that these captured shad had made a sea voyage, and returned to the stream in which they were reared. Should these fish multiply as they have done in other streams, it will not be many years before they will make their appearance in the Kenawha and other tributaries of the Ohio. It would, of course, hasten the matter to have broods of the young fish artificially planted in all these streams.

FISH CULTURE IN COLORADO.

Several ponds in the vicinity of Denver have been stocked with the sun-fish, brought originally by an ox-team across the plains, from Ohio, we believe. One of the largest ponds is made by the waste water of the irrigating ditches connected with Clear Creek. The fish are fed principally with worms bred in offal and refuse food brought from the slaughter-houses and hotels of Denver. This offal is kept in hogsheads near the shore, and when the worms make their appearance they are thrown by the shovelful upon the surface of the pond from a wagon that distributes them. The fish thrive wonderfully upon this food, and it is an easy matter to take the fish with a hook as one sits in a carriage in water two or three feet deep. These little fish bring a high price in the Denver market, and the enterprise is said to pay very well. Shad were planted in the Platte at Denver in July, 1872, and some of them were caught in the fall. It remains to be seen whether they will go to sea and return four thousand miles to the foot of the Rocky Mountains. The trout of the mountain streams here are a distinct species from the *fontinalis*, differently marked and spawning at a different period. No effort has been made to cultivate them. The mud from the mining districts and the sawdust from the lumber mills have nearly exterminated them from some of the streams. So far as the breeding of the *Salmonidæ* is concerned, there are no finer streams in the world than the feeders of the Platte and the Arkansas.

FISH CULTURE IN UTAH.

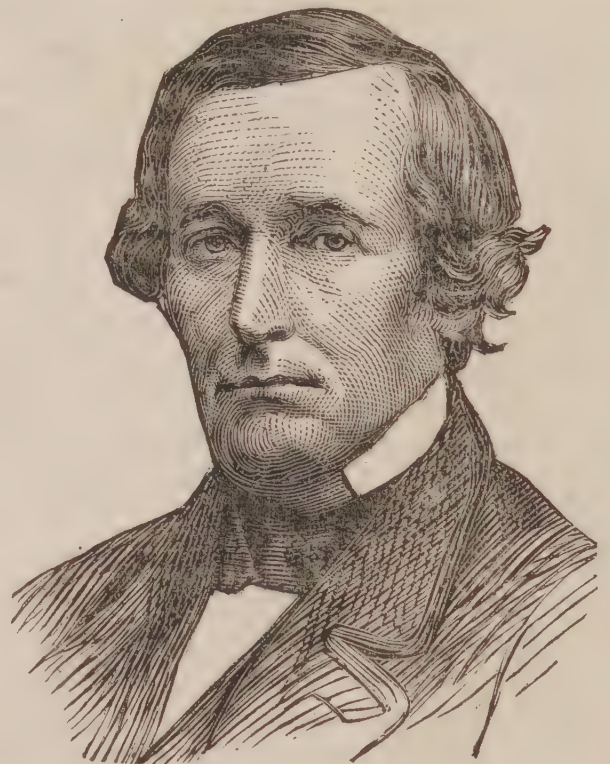
A. P. Rockwood has the honor of making the first movement in fish culture in this new Territory. He organized the Zion's Co-operative Fish Association in 1871, and located the hatching-house at a large spring, a few

miles south of Salt Lake City. The discharge of water is about 500 gallons a minute, and the temperature about 55 degrees. The water abounds with cresses, which furnish abundant feed for the young trout. The breeding trout, about 250 in number, were taken from the Weber River two years ago, and have grown to the weight of two or three pounds. They are a distinct species from the *fontinalis*, and probably distinct from the trout found upon the Colorado side of the mountains. While our trout of the seaboard spawn mostly in November, and in warm springs through the winter, and are from two to four months in hatching, these spawn from the 1st of April to the 1st of June, and are hatched in fourteen days in water of the temperature of 55 degrees. There are no red dots upon them. The eggs are smaller than those of the *fontinalis*. We saw in the market of Salt Lake City cartloads of fish taken in Utah Lake, a body of fresh water thirty miles long, about thirty-five miles south of the city. The trout taken from this lake are of the same species as the Weber River trout, and weigh from half a pound to three pounds. Mullet and chub are also taken, but the flesh is of inferior flavor. Shad were introduced to the Jordan River, which flows into Great Salt Lake, last July. As this body of water has no communication with the sea, and no food in it, the result is very doubtful. If they succeed there, and grow to full size, it will settle some questions in regard to this fish which naturalists have been very anxious to learn. Eels are also cultivated by Mr. Rockwood in a stream near the trout ponds. They have been introduced from the Eastern States. His experiments with this fish will also be of great interest, for it is generally supposed that they breed in salt water. There is hardly any fish of whose habits so little is known. At one time they were thought to be hermaphrodite. Now, it is a question whether it is viviparous or oviparous, like most other fishes. The ova, if it exists during its stay in fresh water, is so small that it has never been discovered, unless the discovery is very recent. It is possible that there may be distinct species, the one inhabiting salt water and the other fresh, or that the one species may have the power of reproducing its kind in either ele-

ment. The eel fry in our Atlantic streams ascend the rivers in April and May, and by fall will weigh from a quarter to half a pound. Then there is a general rush down stream of all sizes and conditions, and they are taken in great numbers in the eel weirs.

MR. ARIO PARDEE AND HIS DONATION.

THERE is a quiet, dignified expression in this countenance, with nothing of ostentation or display. There is a fine intellect, a good development of Benevolence and moral sense, with integrity, devotion, and faith. There is a slight shade of sadness in the picture, which may be owing to the posture or to an imperfection in the engraving. But that is not a desponding or hopeless nature, though it speaks much of sympathy and tender consideration. The owner of such a face is cautious, temperate, prudent, circumspect, steadfast, sound, and sensible. Such a



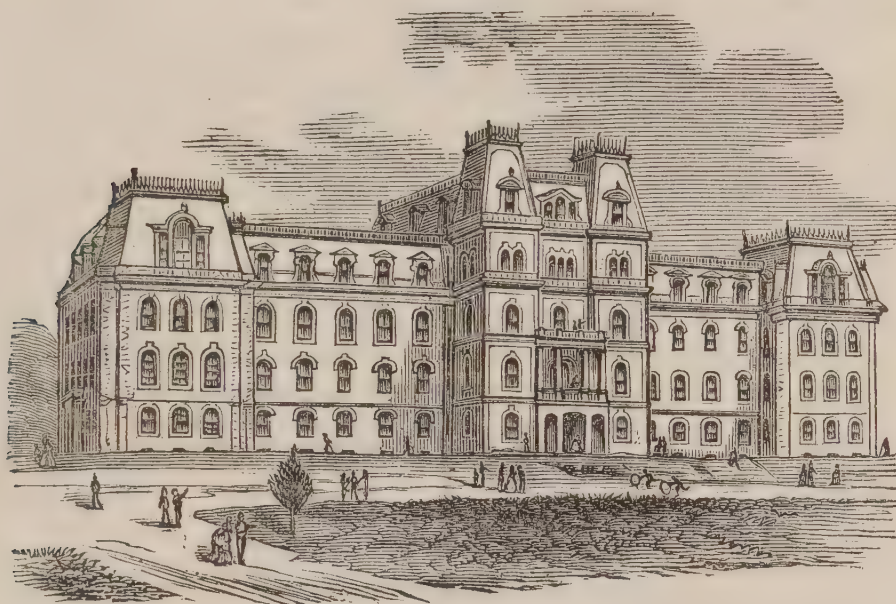
head is adapted to take the lead in our legislative councils. Why not choose such men instead of the dishonest shysters, tricksters, gamblers, drunkards, and libertines who bring reproach and disgrace upon our nation? Here is a person with all the high qualities which give character and stability to our institutions and wise direction to en-

terprises. Why not send *him* to Congress? We regret we have not the materials at hand for a more complete biographical sketch of this excellent citizen. The following is from the *Scientific American*, to whose publishers we are indebted for the accompanying illustrations:

We recently noted the formal donation, by Mr. Ario Pardee, of a large and handsome edifice to Lafayette College, at Easton, Pa. The building, which has been named Pardee Hall, is to be used as the scientific department of the institution. The edifice, to the

ing, among other interesting objects, a complete model of coal mine plant operated by steam, from which the functions of all the different machines and processes can be seen at a glance.

The second story is devoted to geological and mineralogical cabinets, which are arranged to adjoin a spacious lecture-hall. Valuable collections of specimens relating to the sciences of mineralogy and geology have been provided, together with necessary apparatus, books, etc. The third floor contains the cabinets and lecture-rooms for the classes



LAFAYETTE COLLEGE, EASTON, PA.

erection and fitting up of which \$250,000 has been devoted, is situated on an elevated knoll in the eastern portion of the college grounds. It has a total frontage of 256 feet, and its main building is five stories high, and extends back for a distance of 61 feet. On each side are lateral wings, 61 feet in length and 31 in width, joining which, at their extremities, are cross wings, 42 feet front by 82 feet in depth. The architectural effect is quite imposing, the handsome mansard roof and two turrets giving a massive appearance to the whole. The material used in construction is Trenton brown stone, with light Ohio sandstone trimmings.

The first floor contains metallurgical lecture-rooms and private laboratories, apartments for the study of blowpipe analysis, assaying, ore dressing, and similar branches. Extraordinary facilities are afforded for instruction in the science of mining, there be-

ing in the various branches of engineering, and the two upper stories are fitted up with every requisite for the study of chemistry.

The contemplated supply of apparatus has not been placed yet in the building.

PROGRESS—A REMINISCENCE.

IT may be interesting to some of those who read the JOURNAL to note the time when Phrenology was first introduced to the American public. I think it was in 1830 that our papers copied from European journals articles relative to this science. The writer was very young, and could not understand the full scope of such articles; yet from the deep interest manifested by a beloved father, she learned to think and inquire.

One day this dear father came home from his place of business bearing a large package, quite as heavy as he could carry with com-

fort. My curiosity wondered over the heavy wrappings of thick paper, and the large, strong cords which bound them, and I watched with impatience for the opening. As they came off, how my eyes danced, and feet, too, to see an immense book, two volumes, I think, and all full of pictures—on large sheets, like maps, folded between the leaves. But what queer pictures! all heads and faces, and full of marks, and some were bare skulls, almost frightful. Father laid the volume on the table, and mother and brothers and I all sat round to see and hear this great book. What was it? A work of the great Spurzheim, “all the way from New York.”

When father read to us and gave his comments and approval, so enthusiastic, we thought this new science must be a great wonder. Every evening of leisure for a long time was spent by our father in studying the splendid and costly volume.

I was a literal bookworm and a spoilt girl. So in dear father's absence I would lay aside all duties and steal away to explore the big book, and from reading it with the illustrations before me, became for my age quite an intelligent believer in Phrenology. And many

a peep into the mysterious volume did I slyly give my young companions, and felt wise indeed when feeling their heads and describing their characters. And I felt quite proud when I thought I had gained a few proselytes to the wonder-working science.

Time rolled on, and Phrenology was read and talked about in “the Athens of America,” and the cautious, steady Bostonians were to hear the immortal lecturer, Spurzheim! Crowds listened, and many believed.

But Boston honored the gifted man while living and mourned him when dead, and there, near the entrance of that beautiful city of the dead, Mount Auburn, stands the granite memorial of the first teacher of Phrenology in America, as he stood while holding forth the doctrines so dear to his heart. Ah, that long, sad cortege, slowly wending its way to the solemn place where almost among the first was laid the dust of the great Philosopher!

Since then the doctrines of Spurzheim have been read in almost every house in the land, and though he was at times discouraged, yet with disciples as enthusiastic as my father, he was roused to hopeful prophesy, and it is fulfilled.

ETHEL S. CUSTARD.

THE LATE PROF. LOUIS AGASSIZ.

PROF. AGASSIZ was a man of large physique, and well proportioned; he stood about six feet high, and weighed not far from two hundred pounds. He had a large brain, corresponding with his well-developed and symmetrical body; and, being thoroughly educated, his countenance evinced intelligence of a high order. Indeed, once seen, he would be ever after remembered as a remarkable character, and much above the average of men in mental reach. Still, he was human, and though not infallible, he became the natural leader of many smaller, but nevertheless robust, minds, who regarded him with a sort of reverence, which only superior power could secure. Had he been a Roman priest, he might have become a high ecclesiastic, a cardinal probably. As a politician, he might have become a leading statesman, although now-a-days we do not

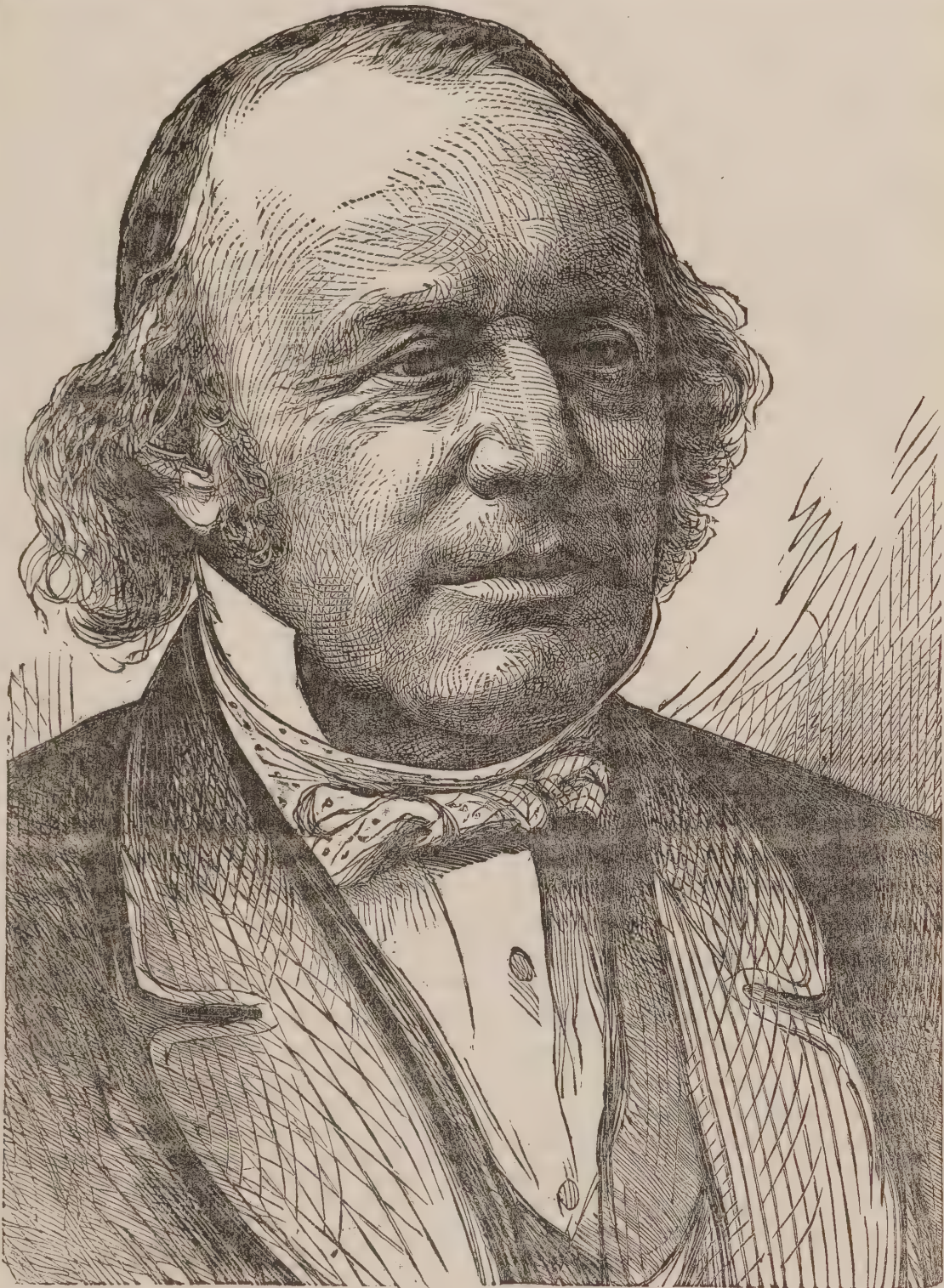
always select *great* men for our highest offices. Or, had Agassiz chosen the pursuit of a merchant, it is not at all probable that his large mind would have been content to deal in the wares of a retail store, behind a counter. Nor would he have passed his life fitting basques to ladies' waists, or shoes to their pretty feet. Being a manly man, he would delight only in manly work.

The *Evening Post* sketches his career in a somewhat laudatory strain, which, considering the many small, ambitious creatures who seek the public eye, may be justified, for surely he *was* as a lion among—monkeys.

Professor Agassiz died at his home, in Cambridge, last evening (December 14th), at fifteen minutes after ten o'clock. He had been ill for a number of days with a disease which paralyzed his body, but left his mental faculties unimpaired, and his death was therefore not unexpected. The sense of loss, a loss which is

well-nigh irreparable in this generation, is not, however, thereby diminished. On the contrary, in the case of such a man as Agassiz, the more attentively his qualities of mind, his attainments, and his actual work and influence

1807. His ancestors were Huguenots, who, because of persecutions in France, established themselves in the Pays de Vaud, a canton of Western Switzerland. His lineal ancestors for six generations back were clergymen. His



are considered, the more will his transfer from the daily affairs of men to the pages of history be regretted.

Louis John Rudolph Agassiz was of French parentage, and was born on the 28th of May,

mother was the daughter of a physician of the canton. Agassiz was born in the parish of Mottier, of which his father had charge.

Agassiz was greatly indebted to his mother for his education. Until he was eleven years

old she was his only teacher. At that age he was sent to the gymnasium at Bienne, in the canton of Berne, where he pursued the ordinary course of classical studies. His amusements, it is related, were fishing and collecting insects. He remained at Bienne four years, and then entered l'Academie of Lausanne, where he passed two years. Although he was continually turning aside from his regular work to dabble in the natural sciences, he decided to become a physician—a choice in which, perhaps, the influence of his mother may be discerned. He therefore, in 1824, entered the medical school at Zurich, where he remained two years, and thence removed to the University of Heidelberg, where he devoted himself chiefly to medical studies. In the autumn of 1827 he entered the University of Munich. This institution of learning at that time had just been reorganized, and among its instructors were many very eminent men. Under these, young Agassiz enjoyed unusual advantages, of which he availed himself to the utmost. He examined plants with Martius and minerals with Fuchs; he studied embryo animal life with Döllinger, and for four years in succession he listened to Schelling's lectures on philosophy.

Agassiz soon formed among the students a rudimentary college society, which was known as the "Little Academy," an organization similar to that of "The Apostles," at the University of Cambridge—to the little club of which Mill was a member—and to the well-known societies in the older American colleges. This select body of young men, under the influence of Agassiz, devoted their meetings to the discussion of scientific subjects. It is probable that the set of his mind toward the field of study which he afterward so successfully cultivated was here taken. About this time Martius began preparing his great work on Brazil, and by him young Agassiz was selected to write the part relating to ichthyology. The work was so well done that Agassiz at once became a naturalist of reputation, a result which induced him formally to renounce the profession of medicine, from which he had departed for some time in his actual work. He obtained, however, the degree of doctor in medicine from the University of Munich, and in the same year the degree of doctor of philosophy at Erlangen.

From this time forward Agassiz devoted himself solely to scientific pursuits. His career was brilliant throughout. His studies were continued at Vienna, at Paris, and in other

European cities. He became the intimate friend of Von Humboldt, Cuvier, and of many other eminent scholars. He published two great works, one on fresh-water fishes and one on the Glaciers of the Alps, a book in which he successfully overturned many established notions. Beside these, he published works in the departments of geology and zoology.

In 1846 he came to this country, and settled in Boston. After lecturing with distinguished success, he became connected in the following year with the Lawrence Scientific School of Harvard University. Since then his labors and their results are well known. His time has been divided between teaching and making original investigations. He has conducted a number of Government expeditions, of which the one sent out in the *Hassler* is the last. Last summer he was enabled, through the judicious generosity of Mr. Anderson, of this city, to establish a school of natural history on the little island of Penekese. His devotion to the work there undertaken undoubtedly hastened his death. His own notion of teaching was there exhibited. No text-books were in use. The students were shown how to find out facts for themselves. Agassiz himself furnished the explanations.

Professor Agassiz had honors showered on him from learned societies and academic institutions. He was as admirable in his home as in the more conspicuous position to which his trained ability pushed him. He believed also in God. Last evening, at almost the moment when he breathed his last, Dr. Manning, of Boston, in the Dutch Reformed Church at the corner of Fifth Avenue and Forty-eighth Street, bore emphatic testimony, before a large congregation, to the sturdiness of Agassiz's faith. No one questions the breadth and accuracy of Agassiz's knowledge, or the strength of his reasoning powers. His maintenance of the old faith in the brightest light of modern science shows that there is no necessary antagonism between scientific pursuits and a religious life, and will make his memory dear to thousands who never looked upon him.

EPITAPHS.

E'en as the flowers which deck the field,
All living things their life must yield;
Ashes to ashes, dust to dust,
A Christian can—a sinner must.

Obedient to the will divine,
All earthly things we must resign,
Must yield to death our life's brief span—
The sinner must—the Christian can.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall!
Thou art the nurse of virtue.

MY MANSION.

BY BELLA FRENCH.

As I go to my work, in the morn's early hours,
When the world is with beauty aglow,
I oft pause by a mansion surrounded by flowers,
And by statues which glisten like snow.

Standing there by the gate I inhale the perfume,
And I mark how the dew-jewels shine,
Oft repeating the words, "All this treasure of
bloom
And this beautiful mansion are mine!"

Of the lands and the houses no deed I can show,
As a title I never yet had;
Should I claim it as mine, full well do I know
That the tenants would think I were mad.

But they sleep in the hours when, an Eden of
light,
It shines forth to be-dazzle the world,
Never seeking its sweets till the shadows of night
All their banners of gloom have unfurled.

Then I pause in my journey, as homeward I go,
For a glance at the place that I own;
For with beauty and light is my mansion aglow,
Though I stand in the darkness alone.

They will pluck the sweet flowers, but frown on a
thorn,
They retreat from the damp of the dew,
And the glorious beauty I find in the morn,
Is a something they never yet knew.

It is true that they fill it with music and song,
That they sip there the rarest of wine;
And the sounds of their gladness come all the
night long
To my room from that mansion of mine—

From that mansion of mine that feet never pressed,
And oh! never will press, I presume,
Yet was given to me that my life might be blessed
With its glory, its music, and bloom.

In the by-ways of life my lot has been cast,
And the most cruel briars are there;
Oh! the world were so shadowy if, as I passed,
No grand mansion gleamed out in the air.

Thus it is, though no deed to that mansion I hold,
And though I in my poverty pine,
That its jewels of dew, and its framings of gold,
And its beautiful flowers are mine.

"SHALL MY BOY STRIKE BACK?"

BY ELEANOR KIRK.

OF all questions asked by mothers, this is perhaps the most puzzling. Shall my boy strike back?—shall he fight if he is attacked? Women have as keen a contempt for cowards as men, and yet, strangely enough, husbands and wives disagree most and oftenest in regard to what they shall teach their children in this matter of muscular morality, than on any other disciplinary subject. The boy becomes an object of delight to the father just as soon as he has developed a free use of his arms, and can scream a pug-nacious accompaniment to the baby fisticuffing. Then papa smiles—and is satisfied. "He'll never be imposed upon, he'll stand up for his rights," are samples of the soothing remarks made to baby's mamma, who is

"foolish enough" to experience a pang of disappointment, a feeling of unhappiness at this early exhibition of temper on the part of her darling. The father welcomes the nervous irritability which shall make his boy as apt to pick a quarrel as to defend himself when attacked; the mother generally deplors all such hints of future difficulties. Both parents are partly right and partly wrong; and the principal trouble in the whole matter of training is that the mother in her capacity of nurse and constant companion for her boy, does not commence early enough to teach him to discriminate between justice and injustice, kindness and unkindness, fair and foul play. No especial pains are taken until Johnny is old enough to play on the side-

walk with other children who have had precisely the same home treatment, and then commences the day of woe. In vain mamma banishes her boy to the backyard; that place she finds too small for Young America, and after threats and promises, Johnny, erect and defiant, makes a fresh start to come in ten to one, an hour or two after, with mud in his flaxen curls, mud all over his breeches, a begrimed face, a skinned knee, and a demolished wheel-barrow.

"What *is* the matter now?" mamma asks in despair.

"Harry Smith wanted to try my wheel-barrow, and when I wouldn't let him, he pegged a stone at me, and then—and then"—blubbers Johnny.

"And then what?" asks mamma, with considerable show of impatience.

"And then I ran after him, and then he got hold of my wheel-barrow and threw it out into the street, and then—then I punched him."

"You should have come straight home to me, you naughty boy. What have I told you about fighting? Just look at your clothes," and then commences the cleansing process, at first with touch a little rough, but the rosy cupid gets the better of the mother's wrath, and by the time the bath is over, Johnny is cuddled as close as ever.

That evening, after dinner, papa mends Johnny's wheel-barrow, and then stands on the stoop while Johnny trundles it up and down the walk, looking daggers at Harry Smith, son of his next-door neighbor, who, in clean linen, watches with undaunted mien his young antagonist's progress. Mr. Smith, too, strolls out with his cigar and newspaper, to see how things progress. Mr. Smith and Mr. Jones exchange salutations—and Mr. Smith remarks, with a knowing wink in the children's direction:

"Had a little tiff, I believe."

"Yes," says Jones; "have to fight it out, I suppose."

"Exactly," replies Smith; "that's just what I have been telling my wife."

In this way the elders wash their hands of responsibility, and the young ones are left to their own devices. Now, if Johnny Jones' version of the encounter was a correct one, Johnny Jones was the one primarily to

blame. His wheel-barrow was his own property, to be sure, but what prevented him from loaning it for a few minutes to his play-mate? A natural selfishness that had not been curbed or trained to self-denial and deeds of kindness by his parents. So they, after all, were responsible for the mischief resulting from their ignorance or carelessness. A child ungenerous enough to refuse to share his playthings in play hours with his chosen companions should be kept by himself until he had learned that no contact with his fellows would be permitted until he had mastered this primary lesson of doing to his neighbor as he would wish his neighbor to do to him. A child decently well born and conscientiously trained will not be likely to experience much difficulty in association with other children. Now, shall a boy who is unjustly attacked strike back, or run home to his mother? A minister settled this question for a friend of mine most satisfactorily, and I feel sure it will prove of value to all mothers similarly befogged.

During the minister's call on the lady above mentioned, Frankie, one of her little boys (she had several), came screaming into the area, in a most heartrending manner. The lady rushed to her offspring to find him, as she expected, in a most pitiable plight. His clothes were soiled and torn, and the blood, running from a deep cut in his lip, had stained his hands and face so thoroughly, that between that and the dirt no trace of the boys original complexion remained. Frank had been fighting, and, worst of all, had been whipped. This humiliation the mother found to be the principal cause of the shrieks that had so alarmed her; and now, after the blood had ceased to flow, and clean clothes were brought out, the mother's chief trouble was what she should say to her minister. To tell him that her boy had been fighting was a humiliation she could not think of inflicting upon herself.

"What was the matter?" asked the visitor as the lady returned to the parlor.

"Frankie got hurt a little, that is all," and tried to lead the conversation into another channel. It was no use.

"How?" was the next short and pointed query.

"In a quarrel with some children."

"I should like to see Frank, if you have no objections."

She had serious objections, but was altogether too straightforward a woman to resort to a subterfuge, as many would have done; and Master Frank was called. The minister took the eight-year old on his knee and commenced to catechise him.

"Were you seriously hurt, Frank, when you came screaming into the house a few moments ago?"

"No, sir," replied the youngster with alarming calmness, his mother thought.

"I didn't care for the hurt a bit; I was crying because I was so angry I couldn't keep still."

"What made you angry?"

"Wouldn't you be mad, think, if you was a little boy, and you was playing with a nice little girl that had got a new doll, and you was having a real good time, and two roughs should steal round the vacant lot, and one of 'em should pull your hair, while the other one stole the little girl's doll?" Here Frank stopped to take breath. "And don't you think you'd be mad if, after you had put the little girl in her own yard, you should run after the boy and get the doll, and then, just as you was a going to give it to the little girl's mamma, the other rough should come along and snatch it away, and push you down! and then, just as you'd punched him good, the other feller should come along and punch you harder?" Frank's voice was pitched to a very high key when he arrived at this last interrogation.

"I think I should have been slightly indignant," was the minister's reply. "And I am very glad, Frank, to see that you have courage enough to try and defend a little girl's property; but I hope you are careful never to begin a quarrel!"

"Oh no, sir; I never do that. I hate to see boys fight, it looks so mean; but sometimes a feller can't help it. If he get's cornered he's got to fight it out or else be called a coward; and I can't stand that name any way."

"It seems to me," said my friend, after Frank had been dismissed, "that your way of dealing with this trouble of my little boy's is entirely contrary to your teaching in the

pulpit. What about when you are struck on one cheek to turn the other also, and if a man steal your coat give him your cloak, etc., etc.?"

"Do you act upon these principles, madam, in any of the affairs of your daily life?"

"Not in the literal manner suggested in the Bible; and I am incessantly goading myself beccuse I do not and can not."

"Then you sin incessantly against the best part of yourself. Suppose a burglar should enter your house, and steal your silver spoons, would you feel called upon by God to hand over your diamond ring?"

"Of course not."

"You would pass him over to the law as quickly as possible, presuming that the law was exactly what the sin-sick soul stood most in need of. The passages you speak of, like many others between the lids of both Testaments, were not intended to be literally interpreted. First, the defense of the weak; next, self-preservation is God's programme so far as I am able to see. Educate your boys with this order in view; make them earnest, peace-loving and self-reliant; frown down and punish severely anything that looks like quarrelsomeness or interference with the business of others. Make it your duty to find out, in case of a riot, all the circumstances, and govern your actions accordingly. If necessary to the defense of another, or in self-preservation, your boy and my boy should strike back, and if we teach them anything else, we are laying a foundation for meanness and cowardice.

GENERALLY.

"Generally, as soon as a man is supposed to have money, his wife gets too lame to walk, and must have a carriage."—*Crusty Bachelor*.

NOW do have a little mercy on us, please do. Did you ever lie down on the lounge and forget to bring the paper from the next room, and ask your wife to get it for you because you were tired, "so tired," you said? Did you ever get ready to go somewhere, and at the last moment forget where you left your gloves? You *presume* they are in the basement, where you went to speak to John, or else in the attic, where you went after a satchel. Just as your smaller half has ex-

plored basement, chamber, and attic, you shout that you have found them in your hat, about an arm's length from you. Did willing feet ever go up to your own room and drawer when you asked, "Haven't I got a clean handkerchief somewhere?"

Wouldn't it be a marvel if that wife wasn't lame after going these little rounds of duty, year after year, and as soon as you are supposed to have money wouldn't you get her a carriage—generally?

Some day you come home and tell that dear wife of yours that you have "struck ile," and are going to build a fine house with a billiard room in it, and all. You think you will buy a fast horse, like Goldsmith Maid, and have a spotted dog, too, and some game chickens; and she—poor, tired soul—that has done her own work for years, and, by dint of labor, found time to take the children out into the open air every day, she thinks how nice it would be for

them, and gently hints that she wants a carriage. Now, you feel so rich and happy in your good luck, you would never think of refusing her that request, I know—not generally.

Now, my good "Somebody," do you think that your wife, or your neighbor's wife, gets lame without a cause? Don't you think it is a blessing that these dear creatures are able to walk, and only give out when a man is supposed to have money and can buy a carriage? Were those velocipeders, who "paddled their own canoe" through our streets a few years ago, lame? *It was* a selfish way to enjoy one's self—could not even take somebody's baby sister with them to ride.

My dear Bachelor, in lieu of your caprices or follies, be as considerate for the extravagances of others; and if a carriage will make the road of life pleasanter, don't wait for a lameness, but when you are supposed to have money, get a carriage for your wife—generally.

LITTLE HOME BODY.

ABSOLUTELY HEARTLESS.

AN OCCURRENCE "DOWN SOUTH."

"HE looks just like that old hawk that used to sit on my garden palings last spring and nab my little chickens whenever the hen wasn't on the lookout. There is a decidedly similar outline of features, the same hooked beak, aquiline profile, secretive lips, and cruel, retracted, yellow cat eyes. Notice, they are set far back in his head, and have a cunning leer. He's a hawk, as sure as I'm a woman!"

"You mistake, cousin!—very much mistake. He is a clever man, a great *trading* character, it is true, with a genius for getting the best of a bargain; but honest and generous withal."

"Well, I have faith in Phrenology, and time will prove the infallibility of the psychological indices in that face. I'm content to bide the verdict."

"A truce to your Phrenology—there's nothing in it."

"Is he good to his wife, cousin Henry?"

"Perfectly devoted; loves his child dearly, too; and gets along splendidly with freedmen."

"Then there's nothing in a face; nothing in a 'bad eye;' nothing in a hawk's beak; but if I were a little chicken I'd run to the shelter of my mother's wing at sight of him."

"A willful woman will have her way. Convince *one* of *them* against her will, she'll stick to the same opinion still. *Au revoir*, mademoiselle; study Nature, *not* books, dear, and you'll cease to be a phrenologist."

Two, three years dragged their slow length along. It was a cold winter night, absolutely dreadful out of doors, where the slippery sleet had caked over the frozen ground, and icicles were clinging to the trees, while a peculiar crackling sound in the air showed the continuance of the storm; such a night as one can best appreciate the warm fireside, and listen with most eagerness to the witchery of somber stories.

My cousin Henry got in from town just at dark with the mail, icicles in his hair, and his slim, white hands almost frozen despite his fur-lined gauntlets. I hurried to help him remove his overcoat, to give him the warmest seat, and get the warm tea I had

kept for him. I asked no questions while I waited on him, knowing his mood so well; and when he had quite thawed under the genial influences, I was prepared for his "Thank you, cousin!—now here's a letter from somebody you are dying to hear from—and here's your PHRENOLOGICAL JOURNAL."

I ran off to read my letter, and when I returned Henry was looking over my new magazine.

"Reckon there's *something in it* after all," he said softly—then aloud, "Guess what your *Journal* reminds me to tell you, cousin?"

"How should I know?—be a good boy and don't keep me in suspense."

"Why, what you said one day three years ago, 'I have faith in Phrenology, and time will vindicate its infallibility'—that in substance, don't you remember?"

"Oh, yes; and it was in reference to Mr. Ashton Baerwald, I think?"

"It was; you insisted he was a human 'hawk,' relentless, remorseless—in short, a regular bird of prey; and I, mademoiselle, had the temerity to oppose your opinion—to controvert your dicta. I am compelled to acknowledge myself beaten, vanquished in the art of character reading, effectually excelled in penetration—by a woman."

"Oh, Henry, do stop your mockery, and tell me in sober earnest what you are driving at."

"Be patient, cousin, 'the world wasn't made in a day!' If I am to tell you a story or furnish you fresh phrenological data, I must do it in my own slow way."

"Well, take your time, sir; I'll go to work while you are getting to the point of your communication."

"To begin then at *finis*, ma'mselle cousin, my quondom clever, generous Ashton Baerwald has only proven, what *you* thought, potatoes very small."

"Henry, you are too bad! Stop your teasing and tell a straight tale, won't you?"

"Did you ever see Ashton Baerwald's wife?"

"Never!"

"She was one of those aggravatingly helpless women—hadn't mental nor physical energy enough to take care of a sick chicken. I used to pity Ashton, and think him mighty good to let her lie up and sleep all the time,

and indulge her occasional apathetic wants. Her voice was a perfect monotone. If she was talking to her child, to Ashton, or the dog, it made not the slightest difference; and at a big meeting where other folks were in a furore of excitement she was the same composed individual that greeted you in the cool of the evening, with a simple 'how d'ye do?' She never seemed to object to Ashton's drinking, nor leaving home for weeks at a time, and when he told her he was going to move to Kansas, he said she never stopped knitting."

"Why, she must have been a curiosity; but no doubt all that was just an outer crust. She felt things, though she didn't say much about them."

"I believe you are right, but I remember regarding her with astonishment one day about a month before Ashton got away. A neighbor lady was visiting them at the same time; and I recall her retailing some astounding bit of neighborhood gossip, touching Ashton himself pretty closely, and reflecting on him severely. Mrs. Baerwald neither changed color nor lifted her eyes from her work, and said 'Yes' in a tone that meant nothing at all; obeying Ashton a moment after when he bade her bring his bottle of brandy, and going voluntarily for sugar, lemons, and water. He offered me a drink, which I am glad I refused, and swallowed himself 'four fingers of a glass,' as drinking parlance hath it. He got off a month after, leaving me the bag to hold, minus fifty dollars; and I was only one of a dozen in the neighborhood victimized, some more, some less, *by him*. Meantime his wife and her two children, a boy six years old and a baby in the arms, departed on their long journey, she so ill provided for that a kind neighbor lent her a brown veil to tie around her hat, and so protect her poor exposed face. They began the trip in a wagon, and after a week's travel Baerwald took his wife and children and put them aboard the train, sending the wagon on in charge of a colored man. The family traveled half a day till they reached a town which was the junction of several railroads, when they got off, because Ashton insisted his wife needed *rest*. He carried her to a hotel, and took the little boy out for a walk. His wife wasn't

well, poor soul, and she went to bed and made no inquiries even about her husband and child till late in the evening, when she asked for dinner. She had just got through eating when the hotel clerk who had gone out to see where Mr. Baerwald was, came back and reported that the 'red-bearded man in the shaggy overcoat, with the hooked nose,' had been seen to leave on the afternoon train by the same route he came. And to her faltering inquiry for the child, her boy!—the clerk replied he had taken him with him.

"The poor thing dropped out of her chair at that; her apathy cruelly broken at last, and they say that neither cold water nor camphor nor hartshorn could bring her to for ever so long, and when she did come to she shed floods of tears, poor soul."

"Wasn't it pitiful Henry? Oh, just think of her and her poor little baby, left alone

among strangers. Did he leave her *no* money?"

"Not a cent; he had even got her watch from her on false pretenses, and took that along."

"What became of the desolate thing?"

"Well, the good landlady interested herself in her behalf, went round the town and told her story and got a purse made up for her. She had some kin in Missouri, and with the money they raised for her she managed to make her way to them. Now, why don't you say 'I told you so.' Isn't that a woman's prerogative?"

"Why, Henry, do you think me capable of exulting in the misfortunes of others?"

"In sooth, no, cousin; but to prove my contrition, to *emphasize* I am *wrong*, you were *right*; here's a check! send on and get the magazine you dote on for me!"

VIRGINIA DURANT COVINGTON.

IT ISN'T ALL IN BRINGING UP.

It isn't all in "bringing up,"
Let folks say what they will;
To silver-scour a pewter cup—
It will be pewter still.
E'en of old Solomon,
Who said, "Train up a child,"
If I mistake not had a son
Proved rattle-brained and wild.

A man of mark who fain would pass
For lord of sea and land,
May have the training of a son,
And bring him up full grand;
May give him all the wealth of lore,
Of college, and of school,
Yet, after all, make him no more
Than just a decent fool.

Another, raised by penury,
Upon his bitter bread,
Whose road to knowledge is like that
The good to Heaven must tread;
He's got a spark of nature's light,
He'll fan it to a flame,
Till in its burning letters bright
The world may read his name.

If it were all in "bringing up,"
In counsel and restraint,
Some rascals had been honest men—
I'd been myself a saint.
Oh, it isn't all in "bringing up,"
Let folks say what they will,
Neglect may dim a silver cup—
It will be silver still.

MISSIONARY WOMEN IN INDIA.

WE copy the following paragraphs from the account of Mr. Seward's "Travels Around the World," written by Miss Olive Risley Seward:

"It is the proud distinction of the United States that our countrymen have designed and brought into execution a practical plan for the amelioration of society in India. Caste in that country has its moral and civil as well as its theological code. Its laws are

paramount to all laws and all institutions of Government. * * * * Caste hindered and defeated two attempted reformations in India before the country became known to Europeans—Buddhism and Mohammedanism. It is caste that hinders Christianity, and seems to render the introduction of all Western civilization impossible. Caste has effected all these evils and perpetuates them through the degradation of woman. Chris-

tianity and Western civilization can only be established through the restoration of woman here, as elsewhere, to her just and lawful sphere. This restoration is just what the 'Woman's Union Missionary Society of America for Heathen Lands' is doing through the institution they have established at Calcutta, and its branches in the provinces, called the 'Zenana Missions.' We accompanied Miss Brittan, the superintendent of this institution, in her visitation of many of the Zenanas, to which, by her unremitting zeal, assiduity, and gentleness, she has gained access. These families are generally rich, though some are wretched and squalid. Even in these the women, like those of the rich Zenanas, are timid, gentle, loving creatures, and all alike are painfully desirous of instruction. The institution employs in Calcutta twelve American women as teachers. They have already instructed sixty native women, who have become assistant teachers in the Zenanas. They have, during the same time, established an asylum, where they support and train twenty additional girls for teachers. Miss Brittan counts 750 native women who have been taught and qualified to become the wives of Hindoo youths who

are prepared for official employment in the universities and schools established by the Government."

Miss Seward further adds an expression of her own pleasure, and that of Mr. Seward, at finding, on their return home, that the "Woman's Union Missionary Society of America" had fully appreciated the importance of connecting the knowledge of medicine with the qualification of teacher. There is, indeed, at this moment an urgent cry coming from all missionaries in lands where women are secluded from society, for medical women missionaries, as it has been fully proved that a knowledge of the healing art will procure an entrance to apartments otherwise securely locked, and to hearts otherwise unapproachable. Which one of all our thousands of young women thirsting for something to do will be the first to take up this cross to follow in the footsteps of Him who called upon His disciples to preach the Gospel to *all* nations?

[The New York Medical College for Women offers instruction *gratis* to those preparing to go as missionaries. Address, with stamp, for information on the subject, Mrs. C. Fowler Wells, 389 Broadway, New York.]

PET DELUSIONS?

DOES LOVE WORK MIRACLES?

BY MRS. OLIVE STEWART.

PET delusions! Their name is legion, for they are many; but among them none is more prominent or more mischievous than one which is here presented, and which may be styled the popular delusion that "Love is a worker of miracles." This has no reference to the broad benevolence, the Christian charity, that we are told covers a multitude of sins; but to that personal partiality felt by an individual of one sex for another of the opposite; and the peculiarity of this particular delusion is that most people hold the faith in this form: "Your love for me shall transform you into an angel of light, or, what will answer just as well, perhaps better, shall place you entirely under my control and keep you acting with a single eye to my happiness or esteem." It is seldom that any one adopts this belief with the personal pronoun changed from the second to

the first person, and if that rendering be *sometimes* true, it is the exception, not the rule; and is none the less a delusion. Of course, the root of the infatuation is selfishness, or at best egregious self-love, though, for the most part, the individual is unconscious of this fact, and is really self-deluded. However, the delusion works a little differently according to the sex of the individual holding it. The Turk is only an exaggerated type of masculine humanity. Man in the raw—that is, before the savage has been well worked out of him—recognizes but two indispensable qualifications in a woman for a wife: first, that she please his fancy; second, that she be unconditionally and unreservedly his, and at his service; any other deficiencies—say such minor matters as want of sense or want of principle, he can supply as suits his occasion from his own superabun-

dance. A gentleman of brains, cultivated taste, and a keen sense of integrity, once said: "I can do the thinking for my wife; a woman does better not to meddle with that business."

"Ah, luckless wit; ah, bootless boast,
For which he paid full dear;
For while he spake a braying ass
Did sing both loud and clear."

Now, if the thinking woman for whose benefit that little speech was uttered, wanted a revenge, she had it—full revenge; for that man was a benedict who had deliberately chosen for his wife a rattle-headed ninny; and he did not find it practicable to do the thinking for her. His postulated scheme was all very fine, but it did not work satisfactorily, and the mistaken lord of creation lived to cry out (mentally), "My punishment is greater than I can bear." His theory was this, "Intellectual women with ready-made opinions are heartless and very troublesome," therefore he married a giddy girl of seventeen, intending to mold her to his liking, and have all her heart; for had he not secured her first affections? and, in short, he was going to solace himself when wearied by labor by reclining on the bosom of—nonsense. This theory was sweet to taste, but reduced to practice, it acted much after the fashion of sugar-coated pills—the griping came notwithstanding the sweetness. The wife did not think much, but she acted a good deal—acted on impulse, as suited her caliber. The husband, according to his theory, was ready to correct this matter by thinking for her; but she found this irksome; then he insisted, and she pouted. He threw himself on her love for him and asked obedience to his wishes. He thought this was going to work like a charm; but soon discovered that the obedience was only feigned, that my lady was deceiving him in every quarter; and if detected she took refuge in tears, lamentations, or reproaches. When he came home at night to rest, she wished to go out; he reveled in books, and his literary taste was of the highest she cared for nothing but funny stories and newspaper murders; and he grew very tired of reclining on the bosom of nonsense; still he said to himself, "She loves me dearer than her own life," and this thought consoled him. That delusion did not last long, and when he found that her heart was quite as shallow as her intellect, and not capable of any strong affection; that she preferred her own pleasure to his, even while cajoling him with flatteries—that she was incompetent to manage his children, but was teaching them falsehood and artifice both by example and precept; and

when, moreover, he discovered, too late, that a better woman would make a better wife, then, indeed, his cup of bitterness was full, and he knew that he had sold his birthright for a mess of pottage. This *true* history did not end in murder, nor yet in divorce, for the man was just, and he saw that he had prepared his own bed; that he could not hope to find in the partner of his life qualities that were never there; so he settled down into a sullen, taciturn man of business, whose creed now is, that women, in general, make up in cunning what they lack in sense. This is certainly not the favorite way of putting the case; but it is the way of stern reality. The ideal simpleton—Chas. Reade's simpleton—exists only in man's mistaken or diseased conception of what is desirable in woman; the actual, living specimen is simpleton all the way through; not merely in a few spots on the surface.

Then as to woman's share of the delusion—Alas! that is an old, old story. A worthless rake, well versed in woman's weaknesses, flatters, fawns, vows reformation, perhaps weeps crocodile tears over past follies, assuring his mistress that her charms, her influence, *her love* will henceforth suffice to keep the erratic, headstrong, devastating current of his hitherto lawless life, pent up within the narrow channel of domestic duties. The silly gudgeon pities this poor creature, this fallen angel, so sadly gone to ruin for lack of her love, and in spite of the warnings, entreaties, or prohibitions of long-tried, dearest friends, she gives herself (backed up by unconscious vanity) to the missionary effort of reclaiming a misunderstood but noble man from the error of his ways; then, too late, she finds that she is no missionary at all—only a gudgeon, caught to be devoured. The upshot of the matter is this: it is a delusion born of egotism and it should not be fostered, this dogma that love can and will transform rakes and simpletons into the best types of men and women. The girl who has been discreet, faithful, and agreeable as daughter, sister, and friend, will bring into the conjugal relation the same qualities; and no man has a right to demand from his wife what he did not look out for in his sweetheart; neither need a woman hope to find a thoughtful, true and honorable husband in a man who has shown himself the reverse in other relations of life. That there are occasional, though rare exceptions, does not alter the rule, which remains and will endure to all time, that we shall not gather grapes of thorns, nor figs of thistles.



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MAN AND HIS APPETITE.

IN the earlier periods of the race, we find that the base of man's brain was more actively developed than at present. Animal propensities were and still are, in all barbarous tribes and heathen nations, much more developed than the intellect or the moral and spiritual sentiments. The child is little more than an animal. Appetite—Alimentiveness—is one of the first organs developed, and this is located in the base of the brain. To eat, drink, accumulate, procreate, and fight, are human as well as animal dispositions. But civilized *man* is expected to subordinate these animal propensities, and to exercise them under the guidance of enlightened reason and religion. But how many men among us to-day, men who have had the advantages of common schools, the pulpit, and the press, are self-regulating, self-controlling, clean, sound, healthy men? How many are there who are *masters* of their appetites? Is it not a fact, that many among us live for mere sensuous gratification, rather than from any higher motives? Do we not live to eat, instead of eating to live? It is the mission of Phrenology to show to each and every individual exactly where he stands in the scale of human development. One is still in childhood, no matter how old in years. Another may be "in his

teens," so far as development of character is concerned, though he may be past forty in years; while a few, only a very few, have attained to fullest manhood, in all their powers of body and mind. Phrenology points out the differences among men, and places each where he belongs in the human scale. One will be found to have a child's mind in a man's body—and *most* men will be found to be slaves to appetite and passion. When, if ever, the race may attain its true position, and become what God intended it to be, depends on circumstances.

We have been led to these reflections by reading a report of a new movement in England, described in the *New York Evening Post*, as follows:

A STARTLING REFORM.—It has been reserved for a woman—a weak, feeble woman—to take the initiative in one of the most needed reforms of the day. The name of this daring reformer is Miss Sturge, of Birmingham, England. The foe she is attacking is Gluttony.

Many of the greatest reformers whose history is presented to us at first drifted accidentally, as it were, into the noble struggles with which their names are identified. Some passing incident attracted their attention, awakened a train of philosophical thought, and led to the grand result which historians have recorded and sages have reflected upon.

Thus it was with Miss Sturge, of Birmingham. Being a lady prominent in educational and liberal measures, a member of a well-known philanthropic family, and a wealthy resident of the city, she was invited to a dinner which was given to celebrate a local liberal victory in certain school matters. The dinner was, of course, a good one, as official dinners usually are. Most people, whatever may be their inward sentiments on points of over-feeding, are usually disarmed by an invitation of this nature. It needs true heroism to be the recipient of such a courtesy, and at the same time to estimate it at its proper worth.

Yet such heroism is one of the attributes of Miss Sturge. Not only did this remarkable lady, with Spartan fortitude, decline the invitation, but she actually took the occasion to disapprove of dinners in the abstract. "I am afraid," she writes, in a letter which was read at the banquet, and must have been to the banqueters as the writing on the wall was at Belshazzar's feast, "I am afraid I have too much objection to celebration dinners to be able consistently to participate in yours. I do not think that they conduce to the national thrift and economy, in which I desire to see the ignorant, on whose behalf you have so ably

fought the educational battle, trained by example as well as precept."

As may easily be supposed, the bold stand taken by the lady of Birmingham has sent a thrill of horror through the British isles. John Bull, in these demoralizing times, has been made familiar with many terrible things. Attacks on monarchy as an institution, on the Established Church, on lawyers' wigs, on the intellect of the nobility, and on many other long-cherished rights and privileges, have marked this aggressive age. But never has any one before been found bold enough to raise an impious hand against that noble—nay, sacred—feature of British life, the official dinner. We can readily imagine the conservative English squire, as he sips his post-prandial port, dropping the *Times* in horror to inveigh against the revolutionizing tendency of the age as evinced in this latest Birmingham idiosyncrasy.

Nor will our own country deny a responsive and sympathetic thrill to Great Britain in this her hour of peril. The official dinner is not unknown to us. If not, as in the mother country, the very palladium of our liberties, it is, at least, a cherished and valued exotic. It takes kindly to our soil, and flourishes here in almost native luxuriance. We receive a diplomat, a president, an author, a lecturer, a singer, with a dinner. We thank God on the 27th of November with a turkey. We hail the blessed Christmas festival with a similar oblation. We celebrate the birthday of our independence with a banquet. Does a venerable lawyer retire from the bar? Give him a dinner! Does a society observe its anniversary? It is by a dinner. Amity is illumined by burnt sacrifices of meat, and Charity goes hand in hand with Gluttony.

Moreover, these dinners, besides breeding indigestion, late hours, and subsequent intellectual and physical inertia (to say nothing of consequential damages in the shape of gout, dyspepsia, and curtain lectures), are often ineffably stupid even to the participants. There are those who have freed themselves from the mental if not the physical thralldom of the official dinner. They confess in their heart of hearts that it is a nuisance, but they have not reached that plane of moral elevation which enables them to cast it aside. No! such heroism has not yet been for us! But perhaps in this country a Sturge will yet arise who will sound the tocsin and go forth to battle with the dragon which ruins alike our stomachs and our purses.

That many "make gods of their beliefs," is too true. That woman has long been a slave to the kitchen, is also true. At present John Bull eats three, four, or more meals a day. What will he say, or do, when brought down to two? This is what our American hygienic reformers are aiming at. The women demand more leisure for self-improvement. They are tired of slaving for gluttons. When this reform shall be made complete, the race will have been emancipated. Let us henceforth discountenance all excessive eating and drinking, and worship Epicurus no more.

THE HUMAN BRAIN.

A SCIENTIST WAKING UP.

THE *Revue Scientifique* prints a very interesting lecture delivered by Dr. Broca at a late sitting of the Anthropological Society of Paris. The learned physiologist stated that in 1861 he had his attention called to the subject of the influence of education on the development of the human head, and that, being surgeon at Bicetre at the time, he had measured the heads of the servants and the medical students at that establishment. About 1836, Parchappe had effected the measurement of the heads of ten workmen, and as many men of distinguished learning, and found those of the latter to be much more voluminous than the others, and especially distinguishable by a great development of the frontal region. These results were the more remarkable because of the author's known antipathy to Gall's system of Phrenology; but Dr. Broca thought them insufficient, inasmuch as they did not exactly know whether the difference was owing to

education or merely to natural intellectual superiority. His measures being especially taken with this view, his ultimate conclusion is that the cultivation of the mind exercises a special influence on the development of the brain, and that this action particularly tends to increase the volume of the frontal lobes, which are considered to be the seat of the higher intellectual faculties. This view is corroborated by a very curious result he obtains from a comparison of Parchappe's measure of his learned men with those of the unlearned; in the case of the former the frontal development was considerable, while in the case of the latter it was the posterior part of the brain that had grown more than the anterior."

The above extract, clipped from a leading New York morning paper, is very amusing to us. For seventy-five years facts of a similar nature, stated as the result of fifty times

more experiment and examination than the above paragraph indicates, have been constantly spread before the public and explained on scientific principles; and those who profess to lead the scientific world have nevertheless stood aloof; and the newspapers, with more wit than information on the subject, have joined the "savans" in ridiculing the phrenologists. But when some of those old, musty scientists simply announce a method of measurement which is older than themselves, and find out such a wonderful thing as that the anterior lobe of the brain is the seat of the intellect, and that uneducated laboring men are more largely developed behind the ears than forward, it is promulgated through the world as something new and wonderful. Dr. Broca is called a learned physiologist. We do not find any fault with the facts; to us they are old and ought to be to everybody who is twenty years of age and can read. Dr. Broca's "antipathy to Gall's system of Phrenology" is thus seen to be a prejudice, simply an "antipathy."

An eminent publishing house has just issued a work entitled the "Cerebral Convolutions of Man." It is printed with illustrations, on tinted paper, and will be read with interest, doubtless, by the scientific world; but if they will turn to Spurzheim's work entitled "Anatomy of the Brain," printed in 1835, there will be found in the appendix a paper read before the Royal Society of London in May, 1829, in which a more minute description of the cerebral convolutions of man are set forth than in this late work, and also a comparison between the human brain and that of the orang-outang. We wonder if the publishing house referred to would be willing to reproduce Spurzheim's unsurpassed "Anatomy of the Human Brain," with its beautiful illustrations. The work is out of print, unfortunately, and it would, perhaps, be a good speculation.

If the words "phrenology" and "Spurzheim," however, could be eliminated from it, and some jaw-cracking French name applied to it, it would, probably, at once secure *caste* and respect among some of our celebrated scientists and professors in universities, who, like Dr. Broca, have an intense "antipathy" to the system of Gall.

We remember, many years ago, when Dr. Thompson inveighed against mineral poisons, and the doctors retorted on him by saying lobelia was a poison, and cayenne pepper was a harsh ingredient for a medical prescription. When, however, they found the people would take them, they said that lobelia was a good medicine in skillful hands, and that mercury was a desirable medicine if prescribed by a learned physician. On the same principle, we suppose, that "Cerebral Convolutions" becomes a topic for interesting investigation, and the measurements of heads in reference to intellectual power, and of animal propensity, is also an exceedingly interesting topic when promulgated by one who has an "antipathy" to Phrenology. That is a little like one who had an "antipathy" to pork *per se*, who would eat ham, and sausages, and mince pies, largely composed of the same material, simply because they came in another form, and from another stall in the market. Dr. Gall's old truth, taught by him to the world in 1796, and from that day to this, widely published throughout the civilized world, that the length of the brain from the opening of the ear forward, with ample expansion of the forehead, indicates intellectuality; that breadth of the head through the region of the ears indicates passion and policy; that length of the head backward indicates social feeling and affection; that height of head from the opening of the ear upward, with an ample expansion of the top of the head, indicates sentiment and morality, should have been by this time understood and accepted as far as civilization and education have gone. But behold, in 1873, nearly a hundred years after Dr. Gall made the discovery, a learned doctor, in Paris, makes a simple statement that the anterior lobes of the brain being large seem to indicate intelligence, and the middle and back lobes of the brain seem to be larger in laboring men who are uneducated, and it is hailed as something new and wonderful. We hope all the scientific journals and all the literary and other papers who daintily stand aloof from what they denominate "science, falsely so-called," will give this fact of Dr. Broca a wide airing. It is a good old truth; it is older than Dr. Broca himself, and older than any of the editors of the papers whose aid we

invoke in disseminating it. Go on, gentlemen; measure heads, every one of you; you have got hold of one good old fact; let the light shine upon it; verify it, and your children or grandchildren may, perhaps, be ready to take the next fact in phrenological truth. You will find a hundred just as good facts on record when you need them.

BRAIN AND EDUCATION.

We have also been informed by the London *Lancet*, lately, that the same scientific gentleman, Mr. Paul Broca, publishes a series of researches he made some years ago upon the relative size of the heads of the infirmiers and of the internes of the Bicêtre. He gives a series of comparative measurements, which he contrasts with those obtained some years ago by Parchappe; and he believes he has demonstrated that, on the one hand, the cultivation of the mind and intellectual work augment the size of the brain; and, on the other hand, that this increase chiefly affects the anterior lobes, which he regards as being the seat of the highest faculties of the mind. Education, he remarks, does not only render man better, and enable him to make the best use of the faculties with which he is endowed, but it possesses the wonderful power of making him superior to himself, of enlarging his brain and perfecting its form. Those who insist that education should be given to

all, have both social and national interest to support them; but if the brain really enlarges with education, there is an additional motive—the evolution of the human race.

This, too, is good doctrine; we believe every word of it; but it is not new to us, nor should it be to Dr. Broca, or any other intelligent reader. As early as 1820 George Combe, in his "Essays on Phrenology," since published under the title, "A System of Phrenology," says:

"The size of the anterior lobe is the measure of the intellect."—p. 85.

"The posterior lobe is devoted chiefly to the animal propensities."—p. 85.

"The coronal region of the brain is the seat of the moral sentiments."—p. 85.

Twenty-five years before this, viz., 1796, Drs. Gall and Spruzheim taught the same doctrine in Paris and throughout Germany, and Combe was but their pupil.

It seems to make a difference with some people whether facts come by way of Jerusalem or Nazareth, and we are thankful that, even at this late day, these old truths are to be accepted and made respectable, and promulgated by the Rip Van Winkles of modern times.

LOTTERIES.

MEN and brethren! ought we, as good American citizens, to sanction or permit wicked gambling, swindling, and downright robbery to be practiced or tolerated in these United States? Are we not in duty bound to break up these nests of corruption? We appeal to the press, the pulpit, and to all people who wish well to their country, to assist in putting a stop to this open, shameless, and most demoralizing mode of gambling. Some of our States have legislated the wickedness out, while others still permit it to rob and morally poison their citizens.

That our readers may know something of the workings of certain gambling schemes, and see how those who invest are swindled, we copy from a Kentucky paper. The following is from the *Christian Observer*, of Louisville, Ky., and will enable the reader to judge how far either benevolence or hon-

esty enter into the scheme. It is certainly high time that all men who love honesty, and desire to shield the weak and erring ones of our community from moral degeneracy, should array themselves against this iniquity, and brand it with its true name:

LOUISVILLE'S GREAT GAMBLING SCHEME.—The State of Kentucky and the country are being demoralized with another of those "Public Library Gift Concerts," which have brought so much reproach upon the city and State, and spread so much demoralization through the whole community. This time the books of the lottery are to be kept open until the sum of \$2,500,000 is gathered up by the gamblers who have the matter in hand. And though the lottery is ostensibly for the purpose of founding a public library, the library can in no case receive more than \$100,000 out of the \$2,500,000 to be collected.

When the scheme was originated, none of

the respectable citizens who started it felt that they had sufficient experience in gambling to manage it successfully. They accordingly engaged an adept by the name of Peters, and made a contract with him to conduct the enterprise for them, and receive in return a portion of the profits. He soon sold his contract to Bramlette & Co., who are now carrying it on. The *Louisville Commercial* states that the contract is in substance as follows:

"Peters was to have the management of the five drawings. The library was to have half the net profits arising from each drawing, unless that half amounted in any case to over \$100,000, *in which case it was to get only \$100,000.* Peters was to be reimbursed for all expenses in conducting the drawings, and to have half the net profits of each drawing, and in case the net profits of any drawing amounted to over \$200,000, Peters was to have all over \$100,000. The library was in no case to get more than \$100,000 from any drawing. This contract was assigned by Peters & Co. to Bramlette & Co. The firm of Bramlette & Co. is composed of some nine individuals." * * * * *

If all the tickets are sold in the present gigantic scheme, the net profits will be at least \$1,000,000. Of this vast sum the library will get \$100,000, and T. E. Bramlette & Co. \$900,000, or \$100,000 apiece for each of the nine partners. Don't these figures show why the lottery ring is a powerful ring, and don't they make the talk about philanthropic motives, and a great public enterprise exceedingly thin?

[It will thus be seen that the Library is a mere pretext to give respectability to a business which the Christian sentiment of all ages brands as sinful. No one who is tempted to participate in it can justify himself on the ground that he is aiding in establishing a library; for in no case will the library receive more than ten cents, and probably not four cents, out of every dollar paid to the concern. We do not see why it is any more inconsistent for a professor of religion to sit down to a faro table, or to spend his evenings in a gambling saloon, than to buy tickets in this monster lottery.

It is well known that lotteries are largely patronized, 1st, by the negroes of the South;

2d, by weak, ignorant, and superstitious whites; 3d, by sporting idlers, whose moral sentiments have become perverted or debased, and who finally come to be paupers and criminals, a tax on the more honest and industrious. We have a right to protect ourselves from these vampires, and are in duty bound to protect the more weak, yielding, and easily tempted from falling into such traps as are set by these lottery swindlers. Who are these lottery managers? They ought to be exposed and branded as the enemies of good government, as they are of mankind in general. To break up this demoralizing iniquity, we call on the good people in all the States to demand of their law-makers such legislation as shall prevent the continuance of such foul practices among our people. Now is the time to strike. Down with the lotteries! Make it a penal offense to rob, cheat, and swindle by any and every device. We demand this as American citizens, in the interest of our American people. Down with the lotteries!]

PRECOCIOUS CHILDREN.

THE Lyons (New York) *Press* says: "At the annual election of officers of the Presbyterian Sunday-school one year ago, the superintendent, Colonel Kreutzer, offered three prizes to the scholars who would commit to memory the greatest number of verses from the Bible, and recite them in the school. The prizes were \$5, \$3, \$2. At the expiration of the year the prizes were awarded as follows:

"First—Willie Young, who repeated 4,600 verses.

"Second—Thaddeus W. Collins, Jr., 3,629 verses.

"Third—Willie Collins, 2,927 verses."

To which the *New York Observer* administers the following mild and sensible rebuke:

"It is very well to encourage children to commit to memory portions of Holy Scripture, but there is danger of overdoing the matter, and injuring the child by such rivalry. We would not give premiums to the one who would learn the most; we would recommend to all to learn a moderate portion weekly, but we would not have them attempt to beat one another in Bible lessons."

[We would follow up those bright children, to see what they amount to; how much good

that straining of such young minds may have done. Will they live and mature, or will they die young? Would it not be more sensible to offer a prize to one who flies the highest kite? or to the boy who climbs the highest greased pole? We believe in committing matter to memory, as a discipline and for future use; but we do *not* believe in even permitting a child to commit four thousand verses of the Bible, or of any other book, to memory. Look out for brain fever, diphtheria, curved spines, or insanity in the case of precocious children. Dr. Holland is right in terming such incitements to juvenile mental effort, "Prizes for Suicide."]

PHRENOLOGICAL CONVENTION.

IT has been proposed that a Phrenological Convention be called to meet in Philadelphia during the Centennial Celebration in

1876. No preliminary steps have yet been taken in the matter, and we make this announcement with a view of inquiring of the friends of Phrenology what may be their views on the subject. It will be necessary that officers be chosen to make arrangements, attend to correspondence, etc. Should a sufficient number indicate their acquiescence to share in the expense for the use of a public hall, for advertising, etc., there is no doubt such a convention could be made attractive and profitable to all interested. To insure its success, however, a goodly number, representing all parts of the country, should participate. Indeed, we should hope to meet representatives from the Old World.

A session of ten or twelve days would probably suffice for a general interchange of views and for the reading of such papers as might be presented. What say the friends of Phrenology to this proposition?

EMILIO CASTELAR,

THE SPANISH STATESMAN.

THIS face is striking in many ways; not that it possesses what are usually termed "strongly marked" features, for the softness, fullness, and symmetry of its proportions preclude no harsh or rough outlines; but the effect, the impressions given, are by no means indefinite or commonplace. The Spaniard of high blood and extensive culture speaks from those harmonious features. The temperament is more highly endowed with the mental element than our artist has exhibited it; the heaviness of the lower jaw as depicted does not exist in the original. Señor Castelar, however, has a good share of vital power, which imparts the support and buoyancy required by a remarkably active and susceptible intellect. The upper side-head is well developed, the self-perfective group of faculties—Constructiveness and Ideality, specially—is well developed toward the upper and forward part of the head, thus coordinating with and impelling the intellectual organs. Hope is also well developed, while Benevolence presides over his moral qualities.

The effect of such a combination as the above implies, is to render Castelar much of an idealist or optimist. His practical or observing faculties are not as well developed as his originating and reasoning faculties, hence he aims at results through measures that are more dependent upon his own earnest convictions of what would be beneficial to the community or nation at large, than upon a mere consideration of what would be expedient in this or that practical exigency.

He is inclined to dogmatism, as most natures of the sanguinely-philanthropic order are. Self-Esteem and Firmness are very influential qualities. He is a good judge of human nature, and possessed of that mellowness and *bonhomie* which win the good-will and cooperation of others. The eyes indicate a clear penetration and power of expression. Known as an orator of remarkable effectiveness, one might be disposed to look for a greater sign of Language. There is a fullness of the eyeball, but the indication is that of a fine balance of the faculty. Castelar is choice in

his phrases, uses words with a prudent regard to their adaptation, his exuberant thought supplying a full measure of ideas on occasion.

The man who has attracted general attention for a few years, not only in Europe, but the world over, because of his earnest and eloquent advocacy of republican principles amid the smoke and din of contesting factions, and in a country whose very name has been a synonym for generations of all that is effete in government

and to insist upon his assuming the executive function in the new order of political affairs which followed the abdication of Amadeus. Castelar is yet a comparatively young man, having been born in 1832. Literature appears to have early attracted him, and stimulated his studies. He became connected with the press, and almost from the first advocated republican sentiments. His talents as a writer secured the chair of History and Philosophy in the University of Madrid, which he retained until 1866, when the revolutionary movement against the gov-



and diplomacy, is now brought to the notice of our readers. All have heard of his persistent struggles against the fanatics of Bourbonism, bigotry, and ignorance, but few, we think, have had a glimpse of his face, as afforded by the photographer's or engraver's art.

Emilio Castelar has exhibited many of the characteristics of the hero, and singularly there was enough of the heroic left in Spanish sentiment, notwithstanding the pernicious and brutalizing policy of the last Spanish monarch who pretended to rule, to appreciate his greatness and perseverance,

ernment of Isabella so enlisted his sympathy that he gave it an active co-operation. That outburst of democratic sentiment was suppressed by Serrano, as will be remembered, and Castelar having been arrested, was convicted of treasonable motives and condemned to death. He contrived, however, to escape from the country, taking refuge first in Geneva, and afterward in France. When the throne of Queen Isabella was overturned, in September, 1868, Castelar returned to Spain and became one of the most uncompromising champions of a Republic. He exerted himself greatly for this object, but at

the general election of the Constituent Cortes, in February, 1869, he found himself one of a small minority. He continued, however, in opposition to Prim and Serrano, to insist on the adoption of a republican policy, and was concerned in the popular agitation in that behalf which took place in October of that year. The recent fall of the monarchy as represented by an Italian Prince gave Señor Castelar a fresh opportunity of trying the experiment of a Spanish Republic. But, with the Communists or *Red* Republican faction in the south to deal with, whose ultra purposes were illustrated in the doings in and around Paris at the close of the Franco-Prussian war, and the Carlists in the north of Spain, it appears as though it were no easy task to establish an orderly Commonwealth based on popular suffrage in that country.

That Castelar has great abilities is unquestioned—whether they have enough of practicality, seems doubtful—but, standing almost alone in his views of public policy, he could scarcely be expected to meet all the exigencies occurring in volatile Spain; and his recent overthrow in the Cortes is substantially a triumph of the Monarchists, and a prelude to the restoration of the throne. As a rhetorician he is superb; probably no parliamentarian in Europe or America excels him in graceful and fervid eloquence. We have before us a few paragraphs from a speech delivered in the Spanish Cortes in the course of a debate on the question of the abolition of slavery in the colonies of Spain. From these we quote the following splendid passages of lofty and effective rhetoric. The allusion is, of course, to Abraham Lincoln:

"I have often contemplated and described his life. Born in a cabin of Kentucky, of parents who could hardly read; born a new Moses in the solitude of the desert, where are forged all great and obstinate thoughts monotonous like the desert, and like the desert sublime; growing up among those primeval forests which with their fragrance send a cloud of incense, and with their murmurs a cloud of prayers to heaven; a boatman at eight years in the impetuous current of the Ohio; and at seventeen in the vast and tranquil waters of the Mississippi; later a woodman with axe and arm felling the immemorial trees to open a way to unexplored

regions for his tribe of wandering workers; reading no other book than the Bible, the book of great sorrows and of great hopes, dictated often by prophets to the sound of the fetters they dragged through Ninevah and Babylon; a child of nature, in a word, by one of those miracles only comprehensible among free people, he fought for the country, and was raised by his fellow-citizens to the Congress of Washington, and by the nation to the Presidency of the Republic; and when the evil grew more virulent, when those States were dissolved, when the slaveholders uttered their war-cry and the slaves their groans of despair—the woodcutter, the boatman, the son of the great West, the descendant of Quakers, humblest of the humble before his conscience, greatest of the great before history, ascends the Capitol, the greatest moral height of our time, and strong and severe with his conscience and with his thought, before him a veteran army, behind him hostile Europe—England favoring the South, France encouraging re-action in Mexico—in his hands the riven country; he arms two millions of men, gathers half a million horses, sends his artillery 1,200 miles in a week from the banks of the Potomac to the shores of Tennessee; fights more than six hundred battles; renews before Richmond the deeds of Alexander, of Cæsar; and after having emancipated 3,000,000 slaves, that nothing might be wanting, he dies in the very moment of victory—like Christ, like Socrates, like all redeemers, at the foot of his work. His work! Sublime achievement! over which humanity shall eternally shed its tears, and God his benedictions."

THE SCIENTIFIC BASIS OF RELIGION.

SPIRITUAL facts are those which pertain to the spirit, and they can only be known by consciousness. How is a man to know that he has a spirit? Is he to go into the chemist's laboratory and try experiments to prove that he has a soul? How will he prove that he has a mind or a heart? He can not detect either by chemical analysis. But he *thinks*, and he *feels*, and that is enough. These are facts of consciousness; and yet they are just as certain—nay, if there were degrees in absolute knowl-

edge, we should say, far more certain than any physical demonstration could make them.

So with the whole realm of spiritual truths. They are addressed, not to the scientific faculty, but to the moral nature, to the conscience and the heart. Christ speaks to the soul of man; and when he declares the moral law, there is within an instinct that answers to its truth. To demand a "scientific basis" for religion—that is, for the love of God, for faith and hope, and penitence and prayer, is as absurd as to test our human affections by mathematics. The things do not agree, they are different in their nature, and to confound them is not philosophy, but folly. If religion is to be judged by science; if moral and spiritual questions are to be determined by material laws, then why not reverse the process, and apply the Ten Commandments to the movements of the heavenly bodies?—*Evangelist*.

To the above the Chicago *Interior* says: This line of argument is liable to be misunderstood. The writer errs in conceding to rationalists the right to attach to the term "science" the manifestly false idea which they persistently attempt to fasten upon it. The world has a perfect right to demand a scientific basis for religion. Spiritual truths are addressed to the "scientific faculty" as fully as political, historical, or any other class of truths. To say that because we do not apply the decalogue to the movements of the heavenly bodies, nor a peck measure to the survey of heights and distances, nor test the properties of light with a yardstick, that therefore Christianity can have no scientific basis, is not a well-guarded expression. The scientific basis of Christianity is the sum of all ascertained knowledge, a basis infinitely broader than that of the materialist, and as much more rational and reasonable as it is more broad. If the rationalist is honest and the Christian is enlightened, they take precisely the same basis as a starting point, *ascertained knowledge*, moral, spiritual, and material. In reaching the existence of God and the truth of Revelation, the Christian is a true, candid, careful scientist. He does not commit the supreme folly of ignoring the first principles of all knowledge, consciousness, nor the almost equal absurdity of ignoring historical truth, mental and moral phenomena, and human experience. "No scientific basis for belief in the love of God!" There is no fact in the whole range of science and philosophy which comes to the human mind with so vast an array of evidences as the truth that God is, and that He is Love and He is Justice. All nature

is full of them. The foundations and superstructure of religious truth are to the dreams of rationalists what the granite mountains are to the mists which float around them. Mathematics has not proved the existence and love of God, but it has furnished a great amount of testimony in that direction, and so of all other sciences. Theology is the science of sciences, to which every other science is tributary. The universe came from God, and in every part it points back to Him. The testimony is so overwhelming that a denial of the existence of God has never yet been made and honestly adhered to by an intelligent and healthy mind. As much as this can be said of no other truth which is dependent for its apprehension wholly upon mental processes, except mathematical truth. No man can resist the fact that two and two make four. No man has ever yet resisted the truth of the existence of God. A great many have tried it—have fortified themselves against it by every available means of resistance, but in every instance that crucial test, the proximity of, or the imminent danger of death, and in many instances the feebler tests of disaster and affliction, have burned up the chaff and stubble of vain sophistry, and exposed the solid residuum of human consciousness, God is. Here is a purely scientific process in the laboratory of the human soul, and will any scientist affirm that this process, wherein the soul deals with primary truth, is less reliable than the crucible made of crockery in the fire made of charcoal? Now, what is science? Simply, verified and systematized knowledge. The human soul of necessity must determine what is and what is not truth. The human soul has verified the knowledge of God as certainly as it has verified the knowledge of geometry. The existence of God is, therefore, one of the irresistible facts of exact science.

But that is not all. We have heretofore said that our firm conviction is, that we shall yet demonstrate the existence of God by the cold processes of the intellect upon truth external to human consciousness. All the new facts developed by modern scientific research seem to us to point in that direction. We shall take occasion hereafter to explain our meaning in this more explicitly and specifically.

[The *Interior* is right. There is no danger to theology in the development of physiology, or any other "ology," for discover all we may, theology is still at the top, and must, from the very nature of things, remain at the top, as the *summa ratio*. There need be no quarrel between true science and true religion; he is simply foolish who suggests antagonism.

The *Evangelist* will yet see and admit the fact that mathematics may be applied to brains, and that mental manifestation is in accordance with organization; and that religion—not superstition—has a scientific basis.]

Department of Literature, Science, Education.

FOREST TREES AND FOREST TREE CULTURE.

THE laws of vegetable meteorology are imperfectly understood. The equilibrium between the animal and vegetable kingdoms is being lost by the destruction of forests. Man, in his selfish grasp for immediate wealth, is rapidly unfitting the land for the occupation of a developed and spiritualized civilization. It is a rude and sordid civilization which is so rapidly disforesting this country and rendering it unfit for the purposes of agriculture. In Palestine and Persia the forests have been destroyed, and civilization has gone with them. The people have sunk into barbarism, and famine has desolated the once fertile regions which were the cradle of the arts and sciences in ancient times.

The subject of forests and forest culture is very important, and should receive the attention of *savans* and legislators. The work of rehabilitating the wastes created by covetous man should be commenced without further delay.

The report of the Commissioner of Agriculture for 1868 sets down the available timber land between the Atlantic and the Mississippi as 100,000,000 acres. The sawed and planed lumber in the United States east of the Mississippi, in 1860, amounted to 450,000,000 cubic feet, while that consumed in fencing, buildings, manufactures, and cord wood, increased the amount for the year to 6,000,000,000 cubic feet. Taking the timber tracts on an average, they will yield about 6,000 cubic feet per acre; or the necessities of the population in 1860, east of the Mississippi, required the destruction of 1,000,000 acres of forests. During the previous ten years the increase of the cleared land amounted to 28,418,551 acres. Allowing three-sevenths of this to have been prairie, we have an annual clearing of 2,000,000 acres. At this rate in fifty years the increase of population, and its increasing wants, would consume every acre of forest in that wide region.

James Little, of Montreal, Canada. says

the United States will, within the next ten years, consume all their pine, spruce and hemlock timber east of the Rocky Mountains. Our supplies are now derived from Maine, New York, Pennsylvania, Michigan, Minnesota and Wisconsin. Pennsylvania consumes annually 500,000,000 feet of her timber, at which rate her supply will be exhausted in five years. The draft on Michigan last year, increased by Chicago's great fire, was 2,910,000,000 feet. This year it will equal 2,000,000,000 feet. Mr. Little further states that during the next twelve years, judging from the past, the United States will require 170,000,000,000 feet of lumber, and that this country has not much more than that amount remaining in store.

In the Rocky Mountains the forests are disappearing before the advance of our present civilization. On the Pacific coast, the immense home demand, ever increasing, together with the exportation to England, France, Australia, China, Japan, South America, Mexico, and the islands of the Pacific, will exhaust that supply in less than twenty years; and those in Oregon and regions northward, in a brief period. The causes now at work will exhaust all the available supply of timber within the lives of persons now living. This is certainly an appalling prospect, and should arouse the farmers, legislators, and engage the attention of scientists.

Two points present themselves for consideration: The effect that forests have in the modification and amelioration of climate, and the source of supply of timber in the arts of civilization. At no distant day the famine of timber will be the great economical question. The store, the dwelling, the wharf, the warehouse demand timber for their construction. For many purposes iron will take its place, but it is difficult now to imagine how people can get along without timber. Besides the economical question involved in the preservation of forests, those of climate and population demand specific attention. The

modification of climate by the disforestation of lands is enlisting serious consideration in some countries.

In the island of Santa Cruz, of the West Indies, within the last twenty years, has been wrought a change in the climate by the clearing away of forests. This island, once a garden of beauty, freshness, and fertility, is now nearly a desert. A process of desiccation has begun at one end of the island, and is advancing gradually and irresistibly upon the land, until for seven miles it is as barren and as desolate as the sea-shore. The frequent rainfalls have ceased upon this island, and it is feared that it will finally become an utter desert. The inhabitants believe this sad result is due to the destruction of the forests.

In our country, in the settled portions of the West, a decided change in the surface soil has been produced; a soil of great evenness has been changed to one of rapidly alternating extremes. The streams which came from living fountains all the year are now stagnant pools in summer, and raging torrents in the spring and autumn. A few years ago the Isere, Drome, Ariege, the Upper and Lower Pyrenees, the Lozere, Ardennes, the Vosges and other departments of France were almost depopulated because the soil was rendered unproductive by the leveling of the forests. So disastrous were the effects, that in 1860 the government appropriated 10,000,000 francs, to be expended at the rate of 1,000,000 francs per annum, for the purpose of planting forest trees. It was estimated that this amount would secure the creation of new forests to the extent of two hundred and fifty acres. It has been predicted that the land in many portions of the United States will become similarly unproductive unless public attention is aroused to the necessity of planting trees. It is stated that the climate of New York has already been very perceptibly affected by the rapid destruction of the forests; and that the felling of the Adirondack woods will ultimately evolve consequences similar to those which have resulted from the laying bare of the southern and western declivities of the French Alps.

Forests are the mothers of rivers, the great regulators of the distribution of moist-

ure. The gradual diminution of the volume of water poured into our rivers keeps pace with the gradual extension of the settled districts in which the forests have been felled. The volume of the water in the Ohio and Hudson rivers is diminishing. In 1837 the Elbe river showed a diminished supply of ten feet in fifty years. The Rhine and the Oder have also declined in their volume of water. In Palestine and Persia the springs have become dry. The Jordan river is four feet lower than in former days. Formerly the Delta of Lower Egypt had only five days' rain in a year. Since Mehemet Ali has planted 20,000,000 of trees the rainy days are forty-five in that region per annum. Ismalia, on the Suez Canal, was built upon a sandy desert, but since the ground has become saturated with water, trees, bushes and plants have appeared, and the climate is modified. At this place, ten years ago, there were no rainy days, but from May, 1868, to May, 1869, there were fourteen days' rain.

In some countries the destruction of forests has been carried so far that it is almost impossible to restore forest lands, because the climate has become so dry, trees will not grow. Although trees may be planted to encourage rainfalls, there is a want of rain to encourage tree-raising. Such is the case in Spain, where failures have been numerous in trying to restore her forests. Perhaps these failures may be attributable to a great extent to a want of skill in forest culture. Near Trieste, a once finely-wooded region was desolated by the Venetians, and twenty-five years ago rain ceased to fall. But under the skillful foresters of Austria, the government has planted several millions of olive trees with a good degree of success.

In this country we should not only plant trees, but save the forests now growing by prohibiting reckless felling. In Europe trees are planted on impoverished lands in order to renovate them. The science of forestry, as illustrated in European countries, demonstrates that it is quite possible for us to make reparation for the injuries done our forests. Between the Mississippi and the Sierra Nevada there are no considerable forests. Further west, there is scarcely timber enough to supply the wants of mining

enterprise, until we reach the Pacific coast. In some portions of these regions forest culture has attracted the attention of the great body of agriculturists. In Kansas and Nebraska more trees, both fruit and timber, have been planted than in any other part of the Union.

In Europe forest culture is a profitable business. Twenty years ago the amount of timber consumed in England was estimated at \$115,000,000, equal to the whole value of our foreign imports at that time, and of this \$80,000,000 was home grown. Oak plantations, at the rate of forty trees to the acre, averaged \$2,200 per acre in value. In Germany there are large plantations of trees, which yield three per cent. per annum on the investment, which is the usual rate for secure loans.

Forestry in this country is regarded as a mysterious work, beyond the reach of the common farmers. Such, however, is not the case. The most important deciduous trees may be grown from seed. Some of the softer wooded trees grow from cuttings as readily as the grape; and with most deciduous trees the seeds or cuttings may be planted where the trees are to stand. No

country has a greater variety of useful trees, both of the hard and soft wooded kinds, than the United States, and these useful trees can be grown on plantations. It is not only the pines, spruces and cedars that are valuable, but also the ash, oaks, hickories, maples, walnuts, and chestnuts; all of these are valuable in the arts, and are essential to the advancement of our civilization; they are now a source of boundless wealth to us, and a want of them for the use of future generations would be a general calamity.

West of longitude 100° from Greenwich, the material for a common wagon does not grow in this country, and east of that meridian such material is fast disappearing. In Ohio, Indiana, Kentucky, and Missouri, hardwood trees that would be worth millions of dollars to-day, have been recklessly destroyed. In Ohio, twenty-five years ago, the peach crop was certain. Now that crop is very uncertain, and the years when there is an abundant crop are the exceptions.

The popular intelligence of the country is unequal to the demands of the times, and the strong arm of legislation should interfere to protect our forests and preserve the equilibrium between the animal and vegetable kingdoms.

D. H. PINGREY.

EX-MARSHAL BAZAINE.

THE conclusion of the trial of Marshal Bazaine, and the sentence of death pronounced by the court, together with the commutation of that sentence by President MacMahon, are well known to the reader, but it may be proper to review here the grave and unusual charges preferred against so high a military officer as a Marshal of France. General Bazaine was brought before the special tribunal accused of disloyalty to his country in her most pressing need, in that he surrendered the fortress of Metz and the army under his immediate command. He had in Metz an army of 173,000 men. Napoleon had surrendered at Sedan on the 1st of September, nearly two months before. MacMahon was on the retreat. The imperial government had gone to pieces. The provisional "government of National Defense" had been devised, and was under the control of persons for whom the imperial officers en-

tertained, as appears from evidence on the trial, little respect. Bazaine says that his knowledge of the new government was scanty, and that it was next to impossible to communicate with it. At any rate it was a new order of things. He was a Marshal of France under the Empire, and not under a Republic. He knew that Napoleon was a prisoner, and both habit and preference led him to consider the welfare of the Emperor as of the first importance. He therefore proceeded to open negotiations, and finally, on the 27th of October, surrendered.

This course of conduct was not becoming a model soldier. As the action of a Marshal of France it was contemptible. He forgot, as the Duc d'Aumale, the chief of the court, reminded him, that France was left, and he deliberately sacrificed the interests of his country for the interests of a dynasty.

The rules applied to the case are those

which have constituted a part of the military law of France for nearly a century, and which absolutely forbid the surrender of a fortress; but in the final adjudication of the questions arising in the course of the proceedings, more regard was given to the *morale* involved in the surrender than to the letter of the law, General Bazaine's course being considered indicative of the lack of that chivalrous spirit and soldierly devotion which would prompt extreme resistance to the enemy.

The severity of the sentence was not altogether unexpected to the French people, nor its prompt commutation by the President on appeal made in Bazaine's

behalf. That commutation simply orders the Marshal's degradation from the military rank he has occupied so many years, and banishment to a little semi-barren island for twenty years.

Bazaine is about sixty-three years of age, and has been connected with the French army since his twentieth year, serving in Africa, Spain, Russia and in Mexico. His portrait is sufficient evidence of his Imperialist leanings. A few years since we remarked

concerning him:

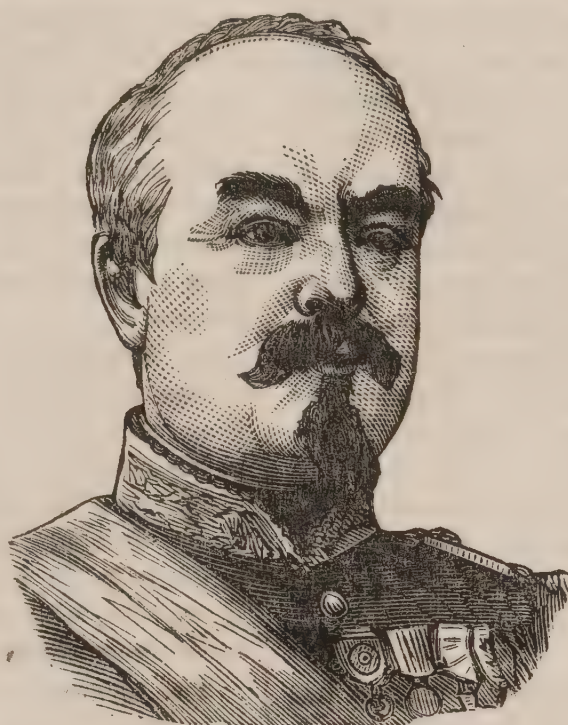
"He appreciates place, power, dignity, and assumption. He has a strong will, and not so much conscientiousness as to be over-scrupulous about the character of his designs.

* * * * *

"Perhaps a little less self-reliance and self-assertion would render him more acceptable as a man and more successful as a soldier."

Those who have examined the testi-

mony given on the trial, and are familiar with the real history of the man, can best say whether or not we read his face rightly. Certainly the last chapter of his career is in our favor.



MONEY—ITS FUNCTIONS AND REQUIREMENTS.—No. 4.

THE CURRENCY OF THE FUTURE.

WE have endeavored to show that at one time the first requirement of the currency of the future, to wit: adequacy to wants of the country existed, and during its existence we enjoyed, notwithstanding the waste and ravages of war, an unparalleled prosperity, and by the highest statistics have also shown decadence in prosperity, coextensive with reduction of the currency, until we are now in an almost entire collapse; COULD show that the material loss to our country from the errors of legislation since the war has been greater than the money cost of the war, *and do boldly affirm* that, with the loss to our great industrial competitor of men by emigration, exhaustion of her iron and coal, our superior power of production of the great staples, iron, coal, cot-

ton, wool, tobacco, naval stores, grain, petroleum, gold, silver, etc., and our better mechanics, if we avail ourselves of our own domestic money, under scientific regulation, at a cost not much beyond its earnings, in ten years we will have re-established our naval prestige; become the dominant manufacturing and naval, as we are the greatest agricultural, power in the world, and instead of the planet's exchanges centering in England, they will be with us.

The SECOND requirement is that such notes shall be legal tenders for ALL purposes.

The present greenback is indorsed as "legal tender for all debts except duties on imports and interest on the public debt." Wipe out these exceptions. The gold received for duties on imports is only required to enable the Gov-

ernment to pay out the same for interest. Let it buy. Such will be the stimulus that this domestic, natural, self-sustaining, and self-regulating currency will give to all our production, that very soon the balance of trade will be in our favor, and gold easy at par.

England, with *infinitely smaller resources and larger proportionate foreign liabilities than we*, not able to furnish her quota of men for her continental wars, agreed to supply the deficiency in money, and did it—boldly meeting the question prohibiting the payment of specie and augmenting her currency. And such a currency! like her consols (consolidated interminable annuities) utterly unredeemable, and therefore infinitely inferior to that proposed by us. But bad as that currency was, it did the work; her productions were stimulated; although heavily in debt to the foreigner, the balance of trade soon became largely in her favor. She received balances at her option in gold or her own outstanding obligations. She wisely took the latter, and now her creditors are mostly her own citizens, all civilization her debtors, with perennial balances flowing in from all quarters.

Since writing the above our attention has been called to an admirable article by W. H. Winder in the *New York Express*, from which we quote freely thus. Will the reader please remember that convertible in the extract means in gold?

In eminent illustration of the foregoing truths we may cite the case of Great Britain, a country in all of the *natural* elements of wealth inferior to the United States and some other countries, yet from being a heavily debtor country to the foreigner, she has become, by a wise *fiscal* policy, the wealthiest of countries, the creditor and the banker of the world, possessing the largest foreign trade of any country. *All countries are tributaries to this insignificant island, and made so only by her wiser fiscal policy.*

Will not a similar fiscal policy to that which extricated from a large *foreign* debt, and has so immensely aggrandized Great Britain, with our vastly superior advantages extricate the United States from its *foreign* debt, and enrich her as it has enriched Great Britain by a "flourishing export trade," that *SOLE specific for the extinction of foreign debt and accumulation of wealth?* What was that fiscal policy which so surely and so speedily cleared Great Britain from her debt to the foreigner, restored specie payment, and rendered it eminently to her interest to invite all countries to adopt free trade and specie payment?

The Government of Great Britain promptly adopted the only policy by which her salvation could be secured; it prohibited the payment of specie, and made the bank notes money. The effect of this fiscal policy was two-fold:

1st. It secured a currency impregnable to the *foreigner*; it was not in his power to contract and expand at his will the *volume* of currency, convulsing trade and industry at every change. It is a fact of official record, the truth of which was verified by the Bullion Committee of Parliament, that no period of specie payment in England, of similar duration as the paper currency, was so free from perturbations as was the era of paper currency; nor had there been a period of greater activity or equal production.

2d. The foreign creditor had but the two modes of an alternative to get home his funds from Great Britain: he could remit in gold or in commodities. The policy of Great Britain sought to render gold so dear and inaccessible to the foreigner, that he would find the commodities in the market cheaper than the gold in market, so that remittance in commodities would be preferable.

The inevitable result of this policy became immediately apparent in the excess of exports, diminishing on the one hand her imports (because by this fiscal policy the currency acted favorably for domestic commodities and against foreign commodities), and augmenting her exports (the same policy in the currency), compelling the foreign creditor to find it to his interest to remit in commodities. This demand, *forced* by the wise fiscal policy of Great Britain, for her commodities, gave full and profitable employment to her productive industries; it familiarized the markets of the world with the commodities of Great Britain, and it systematized and perfected her manufactures to a degree which rendered her the equal of any, and the superior to most, countries in the production of manufactured commodities. But in the very flow and current of the prosperity from this sagacious fiscal policy, there were then, as now, many crazy people obstreperously clamorous for "specie payment," who had scarce a glimmering of the true meaning of this term; ignorant of the fact that the policy then denounced was in strict harmony with the principles of "specie payment," Pitt and Addington successfully combated and exposed these delusions. They presented these truths with convincing force—that so long as Great Britain was heavily in debt to "foreign parts," specie payment was a most transparent impos-

sibility, a clear absurdity; because, the moment paper was convertible, the only person who would convert it, or who had any occasion to do so, was the foreign creditor; and as gold would be a better remittance for him at par than commodities, *he* would certainly convert his portion of the currency into gold and ship it—thus a resumption of specie payment would, in fact, be only a temporary opening of the vaults of the bank to give the foreigner gold at par for the paper held by him, instead of buying it in market at current rates. The very moment the foreigner should thus have drained the gold, being without specie for the conversion of the great bulk of the currency, a suspension was again an inevitable result; but the process of resumption, drainage of the gold basis, and a collapse to suspension of specie payment and a forced return to paper currency would be attended by perturbations in the money market, convulsions among the productive industries, a destruction of values, a disbandment of labor and multiplication of paupers. All of these evils would be incurred by an abortive attempt at premature resumption, to return after it all to a paper currency, with a period for resumption indefinitely postponed.

* * * It was to Pitt a fact as clear as the noon-day sun that Great Britain, heavily in debt to the foreigner, with a convertible currency, would be acting the part of an idiot in pretending that her huge paper currency was redeemable in gold, when everybody knew that *the foreign creditor owned every dollar of the gold; that it would remain or disappear at his option; that for no domestic purpose was gold a necessity; in no domestic transaction was there any occasion for a dollar of gold. Well might he defy the bullionists to show that resumption by a largely debtor country could benefit any productive industry—could benefit any interest except that of the foreigner and monied man; that, in fact, the whole sum and substance of such a scheme of resumption was to give the foreigner gold at par for the currency held by him. The blindness and madness of men who bellow about specie payment is, in the face of all the facts, inconceivable. In Great Britain, under the influence of the policy of holding gold, the foreign demand for commodities increased, exports multiplied, her foreign debt dwindled and was rapidly being extinguished, her manufacturing system was being perfected, and she was fast approaching that point where extinguishment of foreign debt is attended with spontaneous resumption of specie payment.* * * *

The country was steadily and surely pro-

gressing to liquidation of the foreign debt and to specie payment, and had these bullionists not forced matters, Great Britain would have reached, naturally and without disturbance, all of those objects, and in a condition vastly superior to that into which she was prematurely forced. We must bear in mind that we possess *all* of the elements for the production, and successful competition with the foreigner, of iron, cotton, wool, grain, tobacco, naval stores, petroleum, and many other commodities.

The United States has as much money (gold) as Great Britain. Why can not the United States, with this equal amount of money, pay specie and make loans, as does Great Britain? It is simply because the gold which is here belongs to her (England), and she can get it when she wants it, and so with gold in other countries; it suits her convenience, her policy, and her interest to allow the gold to rest with foreign countries until she has need of it. The United States have, really, no gold here or elsewhere, and under its existing financial policy never will *own* any. * * *

With natural resources beyond measure greater than Great Britain, by our blundering financial policy we are made simply a milch cow for sagacious England. * * *

With the withdrawal of the gold by the foreign creditor, the fabric of "convertible" paper falls into ruin; all of it that was convertible inured *exclusively* to the foreigner, who did convert *his share*. Thus the debtor country is left without any money, if only gold and paper convertible into gold be valid money. To convert the other elements into commodities and to distribute them without money is to work with paralytic hands.

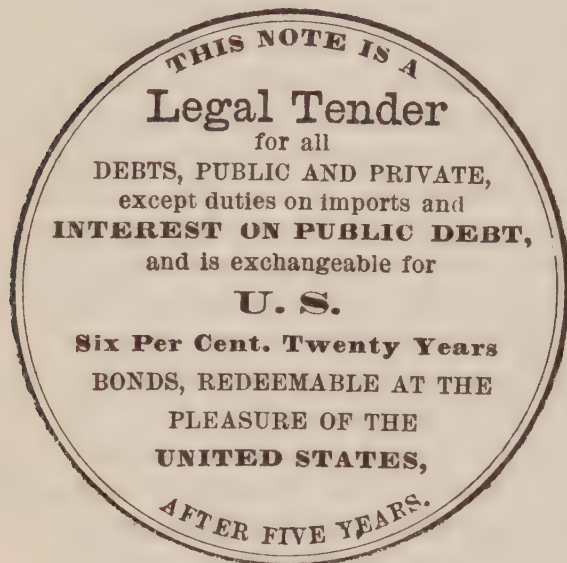
As gold is used **EXCLUSIVELY** by all nations as international, and paper currency is used exclusively by all nations as domestic currency, the *fact* is fixed that there are two distinct, independent currencies. Then why not accept the fact? Why persist in the folly of making the domestic currency depend upon the dealings of the foreign or international currency? Let international currency control international trade; let domestic currency control domestic trade.

And right here we interject a challenge to all of the advocates of "convertible currency," which we are quite sure, however, that not one of them will be found bold enough to accept:

We affirm that no one can prove that any rise in the price of gold, under paper currency, such as ours, can be detrimental to any American productive industry.

Upon this single, simple, sharp, well-defined issue hangs the whole question of a convertible currency in a DEBTOR country. In a creditor country a "convertible currency" is indigenious, spontaneous, and unavoidable.

The third point is convertibility of the currency into Government bonds bearing a low rate of interest. We approached that in the currency issued by the act of February 25th, 1865 (*fac-simile* of indorsement of which is herewith given), reading, as will be seen, ex-



changeable for United States 5-20 bonds. This did not work, as the rate of interest on the bonds was too high, 6 per cent. gold, with exemption from taxation and gold premium at a high rate, equaling 10 per cent. to 15 per cent., sucked them into the Treasury as fast as they could be issued.

The Government got out of this scrape by simple REPUDIATION, and there are hundreds of thousands of dollars of that currency now in circulation, some under protest. This experience should teach Congress to make the interest rate as low as possible; \$3.65 is really too high.

But the fourth element, viz., such bonds payable principal and interest in such currency on demand is the grand, scientific, controlling element of the whole. This gives the long-coveted and much-sought-for element of elasticity to the currency. This is the element lacking in the British currency of her great wars, and if adopted then by England would have made her currency scientific and automatic in lieu of empiric and spasmodic. This removes the stigma of irredeemability. This removes the temptation of the country banks to send their idle currency in the summer to New York, to tempt to speculation; but instead

floats quietly to its resting-place in the Treasury, there to remain until the requirements of the autumn attract it forth to float the harvest of the nation to the sea-board, where

—They lightly fall
As snow-flakes fall upon the sod,
But execute the freeman's will
As lightnings do the will of God.

A short time since an eminent and patriotic banker dined with a friend of mine, and remarked, concerning a party who had hoarded a hundred thousand dollars through the "panic," that "one who would do that, knowing the needs of the country, should be hung." "Whew!" whistled my friend. "What do you mean by that?" said the banker. "Only, in this last half of the nineteenth century, when this republic is almost a hundred years old, a gentleman of the culture of yourself who expresses such an opinion would be a more eligible subject than the man who does what he pleases with his money. Don't you see, that as every greenback is but a small Government bond, bearing *no* interest, the creditor who under proper legislation, hoards the same is a national benefactor?" was the response. "That's so," said the banker.

Again, how many times we have been sailing in a cockle-boat, and the skipper has made us all set to the windward to stiffen the craft, and when he "stood by the sheets to tack," how careful he was to have us ready to "get up and get" to the other side, that the craft might not capsize! Again, we see the big men-of-war, whom the weight of a thousand men on one side would not careen.

I think of that often when folks say, "We build too many railroads." What hurt does it do if we use our own labor and iron? and if we import iron and have such a balance of trade in our favor that we can pay in other products, who's hurt? Nay, suppose, like most of our railroads, it is built in advance of its requirements; it may be hard on the builder, but it is good for the country.

No, my friend; with our financial system right, the country would be so stiff as to carry all like the man-of-war with its thousand men; not like the cockle-boat, which tips over if a fellow gets on the wrong side.

INSANITY.—"Tricks of the trade,"—who would suppose that there should be such conditions as "tricks of the trade" in the management and treatment of the unfortunate whose minds are warped? In our January

umber we gave a lucid description of a personal experience in this matter. The writer describes conditions as they exist in one of the best institutions in this country; nor is there malice or unkindness in this description, but a plain, unvarnished statement, coming from one who has nothing to lose or gain by his recital. Honest physicians and keepers will thank us for calling attention to these things, that they may correct their er-

rors and set their houses in better order. What is most needed in our asylums is intelligence and common kindness on the part of physicians and attendants. The idea of placing a petty tyrant, one who is ignorant, selfish, and without the ordinary accomplishments of common politeness, to have charge of those sensitive, delicate, and very anxious patients, and who are helpless, is simply wickedness.

ORATORY—FAULTS OF PUBLIC SPEAKERS.

BY E. P. THWING.

THE Duchess of Marlboro boasted that she was born before nerves were invented. We should be willing, at times, to lose a portion, at least, of nervous sensibility while listening to what John Ruskin calls "infernal elocution." At the recent meetings of the World's Alliance, we were tortured by men on the platform and in the pulpit who murdered their mother-tongue most ruthlessly. We ask with Dr. Kirk, "Why is it we are compelled to witness the bodily distortions, the croakings and jerkings and screamings, the false emphasis and unmeaning modulations which are now, to some extent, eclipsing the brightest lights of the American pulpit?" When Dr. South once broke down in a pulpit effort, he sank back with the sad ejaculation, "Lord, be merciful to our infirmities!" But not a few of the most wretched speakers now seen on rostrum or in pulpit seem unconscious of their faults. They seem, even, to fancy that they are effective, while the fact is, they are only tolerated because of the useful thought they communicate.

Excessive vehemence is one noticeable error of some speakers. Dr. Chalmers was sometimes so far carried away with excitement that his face was flushed, his veins swelled like cords, his fists were doubled, his heavy frame was convulsed, and foam in flakes flew from his lips. At one time Whitfield vomited blood after a similar exhibition of nervous excitement. Another, well known to the writer, has for years been out of the ministerial work because he "burst his boiler," under too great pressure—that is, ruptured blood-vessels of his throat while yelling out a speech on a certain special occasion. No wonder that a child going home from a similar exhibition of pugilistic oratory ventured her innocent criticism,

"Mother, the minister shook his fist at the folks, but nobody dared to go up and fight him."

Contrast this wrathful frenzy with the calm self-possession of Fox, who, while speaking, heard the whispered criticism of a member near him, "*vec-ti-gal*." The orator recognized the error of making the penult short, as he had done in the Latin sentence he had quoted. Not the least embarrassed, he paused, and remarked that an honorable member corrected his quotation. He thanked him for it, as it enabled him to repeat again the noble sentiment, which he did, and thus turned in his favor a circumstance which would have been to one less self-possessed most untoward.

English comedy pictures "*Forcible Feeble*." The name belongs to not a few of the roaring, hissing, sighing, puffing, and stamping speakers of our day. Forcible they think they are, but theirs is the feeblest of the feeble kinds of speech. Thunder does not kill. Noise is not argument. *Sound* doctrine issues not from the lungs alone.

Power, indeed, is needed in the utterances of truth, but good sense must direct its exercise. Cicero, after several years of public speaking, found himself so injured by undue vehemence that he was advised by physicians to abandon the practice of oratory. He would not listen to them, but put himself under training in Greece with Atticus and Demetrius the Syrian. After two years of study and travel he came home with a smooth, well-modulated voice, the use of which was as healthful to himself as it was pleasant to those who listened. Common, however, as is the fault already noticed, its opposite is still more common. Feebleness of utterance and slovenliness of style spoil the effect of half the efforts of public

speakers, not in the pulpit, alone, but at the bar, the lyceum, or debating society. It is what Sidney Smith called "decent debility." A rhetorician in 1553 satirically describes the preachers of his day as follows: One "is so hoarse in his throat that a man would think he came lately from scouring a harness; another speaks as if he had plums in his mouth; one rattles his words, another chops them; one speaks as though his words should be weighed in a balance, and another gapes as if to catch wind at every third word." Now, truth is a gem that deserves a good setting. While, with

Cowper, we "loathe all affectation," we do admire clean, shining phrases, unobscured by indistinct enunciation, languid drawls, and other repulsive mannerisms. How to secure for "apples of gold," the "baskets of silver," will be the theme of a second paper.

[Our correspondent hits off the faults of public speakers, who evidently have not studied the manual entitled ORATORY, SACRED AND SECULAR, published at this office. To become good speakers or musicians, men must be *trained*. One has no right to inflict a barbarous or ridiculous manner upon an audience, nor is it necessary.]

"BE NOT RIGHTEOUS OVERMUCH."

ECCLESIASTES vii. 16.

Not void of heaven is he who loves;
Heaven views it and the sight approves;
Yet purest principles within
Unguarded may become a sin—
Excessive love of earthly things
Man to a beast's low level brings.

Not void of heaven is he whose mind
Seeks all that's noble and refined;
Who keeps his heart and conscience pure,
Whose spirit is from guile secure;
Yet even here ills may betide—
Excess of self-respect is pride.

Not void of heaven is he who speaks
Truth from his heart, and ever seeks
Its wholesome doctrine to aver;
Yet even here a man may err—
Unkindness dwells in the excess
Of upright men's "straightforwardness."

Not void of heaven is he whose heart
In human sorrows bears a part—
He who, with tenderest sympathies,
His fallen fellow-sinner sees.
But oh! beware, lest loving him,
Thou learn at length to love his sin.

Not void of heaven is he whose soul
Can every fleshly lust control;
Thrice happy he who feels within
Unbending hatred to all sin—
But what if thou the sin eschew,
And hate thy fellow-sinner too?

Be wise! be sober! teach thine heart
Wisely and well to bear its part;
Be just, be ready to forgive;
Be just, let purest virtues live
Within thy soul revealed as such,
But "be not righteous overmuch."

FIRE-PROOF BUILDINGS—SOME SUGGESTIONS.

SOME system is very much needed by which, without greatly enhancing the cost, our buildings can be better secured against fire. We here offer some hints, but do not propose to make an absolutely fire-proof building in the sense of its being so secure against such an agent as to be indestructible; for that, at this age of the world, would be impossible; but we propose an arrangement by which, at a slight cost, a building may be rendered more fit to resist the "devouring" element. Neither do we claim for our method that it is the only one which will give good results; we simply offer it as *one* way in which fire may be prevented from doing wholesale mischief in a thickly-settled locality.

The first thing, in order to have a building in any way fire-proof, is to see that it is built of such material as will resist fire; the next thing is to see that it is properly built. Experience thus far has proved brick to be the best material with which to construct a fire-proof building. It is not as elegant a material as stone; yet, if treated rightly, very grand and imposing structures may be built of it. The parts are small, but if they are properly massed they may be worked up in a most imposing manner. The way in which the interior of the majority of our best buildings are made fire-proof is by forming the floors of rolled iron girders, carrying brick arches; this, though, is quite expensive, and few can afford it. But

even such buildings have been devoured in the late large conflagrations almost as readily as those of more common construction. Few of the better class of buildings in ordinary times catch fire from within and extend the fire to other buildings. Those which are the more apt to be the means of extending fire are generally of the cheaper class—probably fine enough looking from without, but within devised in such a manner as to invite the rapid spread of flames.

Water is the great element used against fire. Steam, under certain circumstances, is one of the best protections; so much so that we now have first-class safes built on the principle of holding in reserve an ample amount of water to generate steam sufficient to act as a protection against fire. Carbonic acid gas is also used to a certain extent, but water is the most general and common agent in use, and this we propose to use by having a supply of it so stored as to be readily made available, and to act somewhat in the manner of steam, thereby keeping the temperature of the exposed parts so reduced as to prevent them from becoming heated enough to serve as a conductor to the more inflammable material within or beyond them.

We would build of brick, after the ordinary styles, using care not to introduce wood in such a careless manner as shall neutralize the benefits of our system. In the process of construction we would leave a slight air-space, say three or four inches, between our building and those on either side; or where parties build together make the party walls hollow, and this we would accomplish without showing any open space in the front. For the interior supports we would use hollow cast-iron posts, notwithstanding that in the Chicago fire they were found to be insecure when exposed to a powerful heat; but we would make some slight changes in them, as will be noticed shortly.

In our plan it would make no difference whether a French roof were adopted or not, so long as it was properly constructed. By the way, no French roof should be allowed on any building, and particularly on a high one, in a thickly-settled locality, unless it were constructed of iron, or in some way made fire-proof. We would propose gas-pipe for the purpose, as being both light and strong, and as possessing the quality of being easily worked into almost any shape. Again, by the way, we would note that a French roof in reality forms more of the side of a building than of the

roof proper, the greater portion of it being flat, as in the majority of other styles of roof.

In order to carry out our method, we would construct what is ordinarily termed a *flat* roof, with the addition of sides, as though we were forming a tank; these sides should be about a foot high and made of galvanized iron. The covering to the roof should be of tin, and water-tight, and the roof itself capable of supporting, when required, an amount of water to the depth of about one foot. Where the roof is long, it would be well to have it divided by cross partitions into bays or sections, from front to rear, otherwise, as water will find its level, if there were a foot of water at the highest portion of the roof, at the lowest point there might be three or four feet, which, for ordinary buildings, might have too much weight. These cross divisions would necessitate extra conductors, yet that would be a small item and could be easily managed; if introduced they should be slightly diagonal, and not straight across the roof, as that would be the most ready way to cause the water, in ordinary times, to run to a common point, the necessity for which would be readily understood by the practical man.

The tank need not be kept filled all the time unless so desired, but be so connected with a hydrant that in case of a destructive fire near at hand the water might be let on in sufficient quantity to fill the tank readily and keep it full during the raging of the fire. Along the top of the sides of the tank we would have such openings as would allow the water, when the tank was kept full, to run over in small streams and down the four sides of the building and into the hollow iron posts. The ordinary conductor pipes should be arranged with a suitable turn-off valve, so that when the tank was filled the water would not be allowed to run off too freely, but be held in reserve for service. Up and down the sides of the building, in the side walls as well as in the front and rear, we would build small troughs, which, in the design for the front (and rear if desirable), could easily be disguised as belt-courses; also within the iron post we would have places to catch and hold small quantities of water; these troughs, as well as the gutters, would hold the water, and the heat, if powerful and near at hand, would generate steam from it in sufficient quantity to enshroud the whole building and afford it superior protection.

In an iron front this arrangement could easily be carried out, and at fires among iron buildings there would no longer be that pecu-

liar danger which firemen so well appreciate. This method, it will be seen, would do away with shingle and slate roofs in commercial and block buildings.

In regard to churches and similar structures with high wooden roofs, they must either be built differently, be more isolated, or have fire-proof bulkheads built near them, else suffer the consequences of being built of inflammable material.

If all can not afford to build in the manner

described, it would be well for the municipal authorities of a city in particularly inviting localities to assist in building fire-proof bulkheads which would arrest the flames and confine them within certain areas. These bulkheads need not be worthless space, but be combined with some private enterprise; the city authorities, for a better protection of the city, allowing certain parties some bonus for thus making their building answer a double purpose.

I. P. N.

OUR CLASS OF 1873—CLOSING EXERCISES,

WEDNESDAY EVENING, DECEMBER 10.

(Reported by J. F. C. Grow, Phonographer.)

IN accordance with previous announcement, our ninth annual class concluded its sessions on the 10th of December. It was, in all respects, most satisfactory. The intelligence of its members, their close attention and earnest zeal in the pursuit of knowledge from first to last, were commendable. All our facilities were brought into requisition; our large collection of busts—casts from hundreds of heads of the virtuous and the vicious, living and dead, with skulls from all parts of the world, representing every degree of development, from lowest barbarism to highest civilization, and anatomical maps and charts, the largest and best, English, French, and German; and models and skeletons, also, were in constant use. Dissections were made of the human brain, and examinations of a large number of the crania of animals, birds, reptiles, etc. In no other place, and in no other way, can there be found so much material for acquiring a practical knowledge of Anthropology as in this collection. We give, below, the concluding proceedings of our late session, as reported by Mr. Grow, Phonographer.—
ED. PHREN. JOUR.

MR. SIZER'S ADDRESS.

THE profession which you have adopted, my friends, in attending this Course of Instruction in Practical Phrenology, is one which, we trust, will grow upon your affection as you increase in skill in its administration. In adopting this profession you do not step down to some fragmentary subject. The engineer has to do with stone and wood and iron. He deals in material. He designs bridges for transit over streams; he constructs houses to shelter our heads, or mills to lighten the labor of men, and there his function ceases.

The physician studies the human body; seeks to know its normal and abnormal action as a physical machine. It is his province to put it in order when it gets out of order, though it is not always considered his province (as it is ours) to teach people how to keep it in order, and his profession, therefore, is more or less partial, though, of course, highly important and useful.

The lawyer helps us sometimes out of our troubles, and makes us pay handsomely for the duties he performs, but he doesn't always tell us, except by the smart of the lash which the pains and penalties inflict, how to keep out of difficulty.

The legislator studies political economy, and frames laws by which communities shall be governed.

The minister teaches us moral and religious ideas. And those who know how much power and influence the moral and religious faculties exert in human weal, will by no means undervalue his high position. If the clergyman understood our subject as well as we understand his, he would say that the man who studies the *whole* of human nature—physical, intellectual, animal, social, moral, and religious—is certainly no whit inferior in point of position or in the elevation of his function to his who ministers "between the porch and the altar." We, as phrenologists, have to do with every child of humanity, with every hope and every fear, with every talent and every passion, with all that is desirable in the present life and all that is hoped for beyond. Every faculty, every emotion that throbs with joy or trembles with fear, comes under our consideration. We do not meet men one day in the week and treat upon ethics and spirituality, and then let them drift out into the currents of life, tempted and buffeted, overcome, perhaps, and at the end of the week, try to get them back on the track. It is our province, gentlemen, to teach people how to obey the laws of health, how to take care of every faculty, every feeling; how to make the seven days in the week one continuous Sunday, sacred to duty and to God.

What is a phrenologist? He is called by some a peripatetic mountebank, seeking a precarious subsistence, pandering to the wonder or caprice of the ignorant and the superstitious. The function of the true phrenologist is not this, though some, perhaps, may have manifested their skill and talent, so far as they possessed them, in that direction. If you follow out the instructions which we have endeavored, with whatever of ability we possess, to give you, you will teach the mother as the fond-

ing is in her arms to study his mentality and guide his growth toward manhood and duty. It is not to read the character of the criminal in the dock, to tell what a terrible nature he has. It is rather to show the mother and the teacher how to keep the little one from wandering, so that it will not become criminal and punishable. If Phrenology were understood as it ought to be, and as it will sometime be, mothers will become the administrators of this science, and possibly leave us phrenologists, as such, to instruct the sons and daughters, the future parents of the race, in the schools. In fact, when Phrenology becomes such as it ought to be, and ultimately, we hope, will be, every school will have in it some clear-headed men, who will know how to teach pupils, as they grow up, mental science as well as astronomy, mathematics, and grammar. We ought to have Physiology taught in our schools, and when true Physiology shall be taught, broad and rich as human nature, then Phrenology will be its crowning glory. The time ought to come when the clergyman and the physician, the teacher, the lawyer, and the judge on the bench shall understand this subject and be able to administer it.

We have to deal with all that belongs to manhood, all that belongs to mentality. There is not a throb of desire, of hope, or fear which it is not your province to study. There is not a yearning soul that seeks to know "What shall I do to make myself all that I ought to be and avoid evil and sin?" in regard to whom you may not administer a word of interest and profit. You can instruct the wayward; guide and regulate the strong. You can teach the timid how to take courage, and the desponding how to look upward and hope for the better.

When you have under your hands and personal magnetism a sincere soul seeking to know what he is and how to make more of himself, you can teach him then and there as no other person can. We have an eminent instance in sacred history, where one man, Nathan by name, preached a pretty strong sermon to a high character, and made his hearer tremble and repent. This personal application of truth to the individual in the solitude and silence of private advice will a thousand times more often help to reclaim a wayward man than if all the terrors of the law were hurled at him from the pulpit or Sinai. It is quite easy for a thousand men to sit and listen to the thundering tones of truth uttered from the pulpit to everybody in general. Men can listen unmoved to truth that would make a single man tremble if uttered to him and made personal in its application. Your text is the individual; and, if we may say it, from this day forward, when you go out into the field, you can save the value of one entire man every day of your practice. One man will receive benefit which will make him twenty-five per cent. more of a man from that day forward. Another man will be saved *in toto* from wreck and ruin. Men tell us sometimes they have thus been saved, and that all they have and hope to be they owe to the interview which they sought with us. If you can add ten per cent. to a man's happiness and power, and have the opportunity of meeting ten men in a day, you will thus daily duplicate yourself by elevating and strengthening those with whom you come in contact, and the community can well afford to give you all the respect and patronage that you will need.

If you will be true to yourselves, and to that truth which is now committed to you, you may from this day onward make yourselves a power in the earth, bringing many souls from wandering, and thus hiding a multitude of sins. Thus you will be missionaries. You may use every faculty that belongs to the realm of mind; you may reason; you may bring history, wit, and humor;

you may bring kindness, prudence, and fear; you may bring hope and aspiration; you may bring courage and fortitude and persistency—all these you may bring to guide and modify and control those who come under your hands. No man has such a power for good as the practical phrenologist. For instance, in a year there will come under the hands of a phrenologist in good practice more persons than sit to listen to the ablest lips in this country on a Sunday. I kept a record once when I was traveling, and that year I examined more than 5,000 people. If you can do what your profession opens to you the way to do, and make each one of these individuals stronger and richer in consequence of your contact with him, what a field you have! what a parish! You do not stand and speak of truths which, by their frequent utterance, have become trite, if not stale, to the common mind. You do not stand before a hundred and twenty people as a congregation fifty-two or a hundred and four times a year, but you have a fresh, new congregation once in a week. You have fifty or sixty new congregations in a year, and have a chance to preach to each of them a pretty good course of sermons, so that your parish is large. And remember that every man, every boy, every child that receives from you advice, counsel, guidance, information, is to go on for fifty or sixty years, as it were, trading on the capital which you have committed to him; working in him like leaven, it will double his power, and thus you will go on exerting a favorable influence not only, but enhancing the sources of happiness and magnifying the opportunities of those who receive your influence.

DELIVERY OF DIPLOMAS.

It only remains for me now to hand to you the certificates of your attendance on our instructions.

To Miss SWIFT: There have been a few women Phrenologists, but I have the pleasure now to confer the first diploma on a woman in our classes. I trust she will be "swift" in every good word and work, and that in this, her chosen field, rich with a harvest that awaits her gathering hand, she may rise to distinction at no distant day.

To Mr. LEE: This is not the first opportunity we have had of giving a diploma to a clergyman. If what we have said relative to the profession of the minister and phrenologist be true, what may we not hope for when the minister and the phrenologist are united in the same person. And now, if never before, my good friend and brother, your field is the world.

To Mr. RICHARDS: The Welsh people are excellent patrons of Phrenology. Wherever you go you will find the Welsh appreciate mental science, and it gives us pleasure to welcome to our circle, not the first Welshman who has taken instruction, and not the first Welshman, we trust, who shall make for himself success. We have good news from the Welsh students, and we expect favorable reports from William Richards.

To Mr. McNEIL: The first impulse which Phrenology obtained in this country in a practical direction, originated in Amherst college, your *alma mater*. Henry Ward Beecher sent to Boston for phrenological books to read up for a debate on the subject, and then asked O. S. Fowler, a fellow-student, if he would like to peruse them; and those books so bought and loaned laid the foundation for practical Phrenology as it has been developed in this country. True, Spurzheim had spent four months in America, and lectured in Boston, where he fell a victim to climate and to over-work, and was honored by the best thinkers of the time with burial in Mount Auburn, and a memorial in imitation of the tomb of Scipio, which was raised over his mortal remains as a monument to his wisdom and worth.

Mr. Wells once asked Mr. Beecher what aid Phrenology had been to him in his profession as a preacher. He promptly replied, "Suppose I were on an island in mid-ocean, and permanently cut off from obtaining anything from the rest of the world, but having all the tools and machinery for raising crops and manufacturing other useful things. If some night pirates should land and rob me of all they could carry off, and burn my books, tools, and machinery, and leave me despoiled and desolate, to construct such rude tools as might be possible under the circumstances, without Phrenology and the aid it gives me in treating of mind, I should be as much at a loss how to proceed effectively as I should to carry on farming with my appropriate implements destroyed."

Now we have the pleasure of presenting a diploma to a graduate of Amherst College, hoping that, if he do not reach the altitude of his predecessors, he shall at least honor their memory by the able support he shall give their favorite science.

To MR. CANDEE: Physiology is an interesting subject to study, and is becoming every year more and more sought for. We have the pleasure now to present to Mr. Candee, a student of physiology, now a phrenologist, a diploma, trusting that the sciences of Physiology and Phrenology in his hands shall receive fit illustration, and the public decided benefit.

To MR. GRANBERRY: And we welcome our young friend from Mississippi, the youngest student who has graduated with us. He has a long, and, we trust, a prosperous life before him, and we give him the right hand of fellowship with words of hope and cheer, and bid him go into the large field where his home is—the great, broad South—where, we trust, he will find a rich field for the exercise of his profession. We expect to hear, as long as we live, good news from Brother Granberry.

To MR. MACKENZIE: George Combe and his brother Andrew were Scotsmen, and the world owes to Scotland much, and Phrenology not less. And the name Mackenzie, an historic name, rich in great deeds, why may we not hope that our Scotch born friend, who has seen life in the West in some of its rougher as well as in some of its smoother aspects, can be able to carry Phrenology to the borders, and plant it with the early steps of civilization as it marches westward until it shall belt the continent. Mr. Mackenzie, I bid you welcome.

To MR. MCCREA: Mr. McCrea, a Scotsman as well, deserves to come in here. We trust that his strong Causality, and those strong spiritual elements of his, may find in this field ample room to work, and that he shall be able to illustrate the subject in its higher and more philosophical forms.

To DR. CHANDLER: GALL was a physician, his associate, SPURZHEIM, was also a physician. Yet some physicians now-a-days have thought it popular and perhaps profitable to ridicule and sneer at Phrenology. It gives us pleasure to welcome Dr. Chandler to the phrenological field, and though he has received other diplomas, we tender him this, and trust that in utility it may not be second to any, and that while he treats the body, he will be able to treat the mind as well.

To MR. PHILBRICK: To a son of Massachusetts, now transplanted to the West, we tender all good wishes and diploma, hoping that he will be able to show the practical value of Phrenology, as he is largely endowed with practical qualities, and, like his mother State, Massachusetts, be able to make his mark wherever he goes.

To MR. THOMPSON: D. D. Thompson enters upon the field of Phrenology. He had a namesake in the field who was a woman. She was a success; she was a noble woman, and, we trust, in tendering to Mr. Thompson the

open sesame to this profession, that he shall not fall short of any of his name, doing which he will shed no dishonor upon the profession.

To MR. SNELL: The Keystone State calls for another diploma. Mr. Snell has strength; he has natural talent and time; culture and practice will bring to him, we hope, opportunity and success.

To MR. ASPINWALL: Mr. Aspinwall was a student with us last year. He has attended faithfully upon a second course, with what advantage time will tell. We give him this diploma, confident that with his moral tone, and his inquiring spirit, he will be able to evince to the world that his studies have been not in vain, and that the instruction he has received will have profited him and those who may listen to his teachings.

As our two friends from Michigan, the brothers James and Orville Curren, were obliged to leave for home two days since, by engagement, they received their diplomas and our best wishes. Faithful, intelligent, and successful as students, we doubt not their talent and courteous bearing will open to them the door of success wherever they may go.

Mr. Wells then arose and said he would defer to the members of the class if they had anything to say.

Miss EDNA H. SWIFT, selected by the class, arose and delivered the farewell address in behalf of all, which we gladly present in full:

FAREWELL ADDRESS BY MISS EDNA H. SWIFT.

Professors WELLS and SIZER: For some time past we have been associated as teachers and pupils. We came together as strangers from different parts of this vast country for the purpose of receiving from you such instruction as would have a tendency to elevate us in the scale of being, and, as we briefly recall our united labors in the fields of knowledge, our hearts swell with pride and gratitude to you, our noble pioneers. When we consider the arduous task you have undertaken to vindicate and establish, one of the noblest of sciences, which at times has been almost engulfed by the persistent opposition of bigotry and skepticism, we feel that you now merit the victor's crown, and hope that you may live to be adorned with the conqueror's garland of *immortelles*.

The weeks that we have been under your instruction have been to us a season of the greatest profit in the acquisition of important truths.

The candor, the fidelity, and the honesty with which you have investigated Anthropology and Psychology, and the self-sacrificing devotion with which you have presented them to us, are worthy our highest praise, and as long as memory lasts will not be obliterated. We trust your teachings have been received in honest hearts, like "seed sown in good ground," "bread cast upon the waters to be gathered after many days."

We will never forget your words of counsel and encouragement. The influence of your kindly Christian character will go with us in whatever scenes our lot may be cast. May Time deal kindly with you, and may your influence in the future, as in the past, cause many to rise up and call you blessed; and ere the end shall come, may you be permitted to see the doubts, the prejudices, and the ungenerous opposition to your favorite science dissipated like the mists of morning before the rising sun, and Phrenology shine forth in all its power to guide, to comfort, and to elevate mankind.

And now that the time has arrived for us to extend to each other the parting hand, we know full well that it shall be for a time only. The zephyrs that blow upon us in this world will soon have ceased to fan our brows. The voices heard within these walls, the tongues that

have uttered words of cheer, and the hearts entwined by the fondest ties of affection, will soon be hushed and motionless; but the spirit that now animates us to deeds of valor is destined to live on and act in the great beyond. Then, I trust, our immortal longings will be satisfied, and we shall contemplate with new delight the beautiful truths you have so clearly set before us.

REMARKS BY MR. WELLS.

It has been and is the most ardent wish of my life to see Phrenology so widely disseminated that the race may have its full benefit. From my first acquaintance with this subject I was impressed with its great utility, and resolved to continue in its service while blessed with health. I have no other motive than the wide extension of this subject, that mankind may be blessed with its advantages. I believe with the Hon. Mr. Rusk, late United States Senator, who said, "When a man properly understands himself, society has a guarantee for his good conduct and usefulness," and, I may add, that when he properly understands himself he has taken the first steps toward good citizenship and a higher civilization.

I want to see Phrenology introduced into all our institutions of learning, and especially into our asylums for the insane, so that those unfortunates, whose minds have become unsettled, may be treated in accordance with scientific principles. I am told a considerable increase in the recovery of patients where Phrenology has been understood by their physicians has been attained. I want to see it introduced into our prisons, so that this unfortunate class may be put in the way of reformation, that culprits, when treated in harmony with their mental constitution, may be in the way of improvement, and many of them become good citizens; whereas when they are kept in confinement, and treated in a brutal manner by ignorant keepers, we can have no hope of their being improved or reformed. I wish to see Phrenology introduced into our common schools, and pupils classified according to their mental peculiarities and temperament, those of one temperament and style of mental development treated in exact accordance with their peculiarities. In this way government, discipline, instruction, and progress would be comparatively easy in respect to all. The subject should be understood by parents and those who are to become parents, that they may relate themselves rightly in marriage, and keep themselves in a proper condition to become the parents of healthy, intelligent, and moral children. These principles may become, in the hands of good men, an agent for civilization and a true religion. North American Indians and Africans, and others of the less fortunate classes, will be more wisely treated as the result. Had we a million of dollars, it should be invested for this end.

You are now working apostles in a good cause. Blessings will follow you if you work faithfully and faint not. I would stand behind you and buoy you up, but he becomes strongest who tries to walk alone. As you gain strength, confidence, assurance, and self-reliance, with a trust in Providence, nothing will stand in your way; success will crown your efforts.

Mr. Wells then presented to each member of the class a copy of *New Physiognomy*, and a bound volume of the *PHRENOLOGICAL JOURNAL* for 1873, remarking that he would be pleased to hear from each member in regard to his introduction to the subject of Phrenology.

RELATION OF EXPERIENCES BY MEMBERS OF THE CLASS.

REMARKS BY MR. MCCREA: I have a feeling I wish to express. From early boyhood I have been an admirer of the Quakers, and since I have come to manhood, as well as before, I have adopted the custom of speaking when the spirit moves me. When I was a boy about six

years old, I remember of looking at a symbolical head owned by my brother. I studied and spelled it out eagerly and anxiously. When I was about twelve years old my brother left Scotland and came to America. He had also a bust, and I recollect of spelling over the long names and trying to pronounce them. When I was about seventeen I was working in a Sunday-school with a gentleman with whom I became very intimate, and he said to me, "Why don't you subscribe for the *PHRENOLOGICAL JOURNAL*? You ought to, for I know you would like it." He showed me a specimen number, and in less than a week I sent on to the office and got it, and since then I have been a regular subscriber. I have read a great many of the publications from this office, and with the greatest admiration and benefit, and I say here that whatever I know on almost any subject I owe to the publications of this office and the *New York Tribune*.

MR. MACKENZIE'S REMARKS: I can't suppress the inclination that rises in my mind at this moment of returning my sincere and heartfelt thanks to my teachers and to my fellow-students for their kindness toward me during the few weeks of our acquaintance. It is true that in the earlier part of my life I have not had the advantages that some of you have had of acquiring a knowledge of the rudiments of the English language. Nevertheless, I feel the responsibility that rests upon me from this time forward. My past life has been spent among the red men of the forests and plains. I am better acquainted, perhaps, with their manners and customs than with civilization and her sweet surroundings. I realize that we have taken the responsibility upon us of co-operating with the firm of Fowler & Wells in lifting men from groveling in the earth and placing them upon a higher and nobler plane, and of directing their steps toward the kingdom of God. And I do hope that I shall ever hear from my fellow-students that they have been uncompromising in extending the truth and truth alone. I leave the floor and hope to hear from those who have had the advantages of a college education.

MR. ASPINWALL spoke as follows: In April, 1871, I passed by your window. Your phrenological busts and other articles attracted my attention. I came in and secured a catalogue of your works. I took it home. I read your description of *New Physiognomy* especially, and thought it a novel idea to be able to read character by looking at a stranger's face. Shortly after I ordered *New Physiognomy*, and read it with great interest. But my estimation of the value of Phrenology has risen from the novel up to the useful, and now it is my intention to make use of Phrenology; if I can not as a profession, I will put it to use in practical life as long as I live.

This is the second course of instruction I have received here, and I do not feel the least regret for what I have paid for this instruction, which I consider invaluable.

To you, as my teachers, I feel very grateful, and will ever remember you with feelings of high regard.

MR. CANDEE remarked as follows: As we seem to have formed a class-meeting, and personal experience is the topic, I will give my testimony.

Three years ago I was practically ignorant of Phrenology. My mother has long been a firm friend of this science. About ten years ago she was perusing Combe's *Constitution of Man*, and desired me to read it. This was my introduction to Phrenology.

In the winter of 1870 and 1871, while attending school in Cleveland, Ohio, I listened to a lecture on this subject by O. S. Fowler. He demonstrated quite clearly that Phrenology was in harmony with the Christian doctrines. In the fall of 1871, while at Cazenovia (New York) Seminary, I had a chum who was a phrenological stu-

dent, and had many discussions with him upon the subject. It was at this period that I became acquainted with the PHRENOLOGICAL JOURNAL. Knowing my mother's deep interest in the subject, I presented her a year's subscription of the JOURNAL, and I have since been a constant reader of it. The information I obtained from the JOURNAL led me to purchase several volumes pertaining to Phrenology, and to inquire into the details of the subject. Through a vague knowledge of the subject, I had supposed it taught materialism, and was inimical to the Christian doctrines; but upon further investigation I discovered that my fears were unfounded. It revealed to me wherein I was deficient, and how I could remedy the evil, and I was convinced of the utility and truthfulness of its principles.

I taught school two terms, and observed that the natural tendencies of the pupils conformed to phrenological developments. One of my students had a wide notoriety as a mischievous character. He was careless, heedless, imprudent, and always in trouble. If reprimanded, he would repent with tears, and promise to be watchful in his conduct in the future; but all to no avail. On examining his head I noticed Cautiousness was deficient, and concluded the fault was more from constitutional weakness than designed disobedience.

To the faculty of this institute I return sincere thanks for the kind, efficient, and practical instruction extended to us. We go forth strengthened with the Christian spirit and the elevated enthusiasm with which you have inspired us to disseminate the refining truths of the noblest of all sciences. We are to teach men that they possess all the qualities that will enable each to have the highest enjoyment, and become an honor and benefactor of mankind in developing the whole man according to the laws of the Creator; or by a wrong and perverted use of the same faculties become miserable.

I hope that with God's help we may extend our influence, and bring many, yea, all the world, in some future time, to open their eyes to all truth, and see that nature and revelation harmonize.

MR. RICHARDS said: I can say that I have been saved by Phrenology. Man was to me a great mystery. I was a mystery to myself, and as I jogged on I didn't understand myself. Some way or other I couldn't harmonize this, but Phrenology has solved the problem. I begin to understand myself, and I hope to live in harmony with myself and with society, inspire many with bright hopes, and do something toward spreading the truths of Phrenology.

DR. CHANDLER said: In my youth I became the possessor of Combe's Constitution of Man. Although admonished by a pious relative it was a dangerous book for boys to read, as Combe was a Deist and an infidel, yet wishing to test the merits of the production for myself, it was carefully read and studied.

Not finding those objections verified, but that it contained an exposition of the relation of man to man, and also his relation to God, in a logical and analytical force and clearness second to none. Desiring to know more of the science of man, of the practical bearings of Phrenology, explains my attendance during this term of instruction, and my presence here to-night.

This has been the most pleasant and profitable season of instruction of my life. The geniality and kindness of our instructors, in connection with their ability and aptness to teach, has created a feeling of esteem and confidence in their behalf that can never fade away.

I rejoice that there is one school of science whose teachers dare to sever from its lectures that species of bombastic declamation and superfluous minutiae which

is unavailable, as it is destitute of practical utility. Surfeiting the mind with matter which is not essential to real life is a sad abuse of time and talent. It forcibly reminds me of dealing out a bushel of chaff for mental pabulum at the bottom of which there is one grain of wheat, and very often finding that grain musty.

In relation to this school of instruction, it is but justice to our teachers to make this remark: In medical college during one term I listened to 400 lectures, the next term to 450, the two terms comprising thirty-six weeks, and I must say that I have received more in the past six weeks here of practical knowledge relating to life, the brain and its functions, than I did during the thirty-six weeks I attended medical college, though I highly appreciate the instructions there given.

Our instructions here have been condensed, refined, practical, and, at the same time, scientific; the principles taught being founded on and illustrated by nature. That we have received vast benefit ourselves, even if we never enter the field to disseminate its principles as taught us, not one of the class will for a moment doubt.

Phrenology deals with and teaches valuable lessons from pre-natal to senile life. This science is the noblest in its character, highest in its field of labor, and sublimest in its conception, for the entire elements of man are developed and included in its teachings. Moreover, the physician's field of influence is greatly extended by a knowledge of the mental nature of man as founded on his organic constitution, especially when called to consider and treat that formerly mysterious disease, insanity.

MR. THOMPSON said: I once supposed that Phrenology was the same as witchcraft—in league with evil spirits. About a year and a half ago, while looking over a collection of books in a store, I saw the "Self Instructor," and bought it. After reading it through I was convinced there was more than witchcraft in it. I sent for more books on the subject, and the more I read them the stronger became my convictions of its truth and reality.

I had believed Phrenology to be in opposition to the Christian doctrines, and, of course, supposed it favored materialism; but after studying and comparing its principles with the teachings of Christianity, I not only became convinced that it was not in opposition to the Christian doctrines, but that it was in harmony with the highest practical Christianity. Being thus convinced of its truths and great importance, I sought to extend my knowledge of its principles; and with the instruction I have received here, thanks to my teachers, I hope and expect, in going forth into the world, to be able to disseminate its truths in such a manner that my fellow-men may be benefited. In conclusion, I tender my sincere thanks to Mr. Wells and Mr. Sizer for their kindness, and for the able and efficient manner in which they have assisted the class in the study of this important science.

REMARKS BY REV. GEORGE A. LEE: In the city of Baltimore, where I was born, I heard a man describe the character of two persons, and I thought it was something remarkable that a man could look at a stranger and delineate his character. Some years later I came across the PHRENOLOGICAL JOURNAL, and read it regularly with interest. I had a longing desire to come here and take a full course of instruction. While I was studying the science, the question would arise in my mind, Are these things consistent with the Scriptures? After patient study I found that they harmonize in every respect.

Although there is opposition to this science, yet when truth is presented to people in a proper way, and they catch some new idea, it is wonderful what an impression it makes upon their minds. I am very glad, in the Provi-

dence of God, I have been permitted these last few weeks to be with you here; and I feel that I could stand up to-day and recommend you and your works throughout the length and breadth of this land.

MR. SNELL said: I became deeply interested in Phrenology by reading the JOURNAL. I for a long time wanted to attend this course of lectures; and I must say that I have found it to be all that I had imagined it, and more too. I think we have received a great deal more than is advertised. I, for one, feel thankful, and my gratitude for what I have received here I hardly know how to express.

MR. GRANBERRY said: I have no experience to add, but I would simply return my grateful and heartfelt thanks for the courteous and able manner in which a knowledge of the subject has been imparted to me. I wish my instructors a long, happy, and prosperous life.

MR. PHILBRICK said: It was probably seven years ago that I first saw the PHRENOLOGICAL JOURNAL. About six months after that I became a regular subscriber. I think I learned as much from that as from all the other reading matter on the subject. My teachers, accept my thanks for your earnest endeavors to teach us the science of Phrenology.

MR. MCNEIL said: My phrenological reading was desultory, and was pursued rather from curiosity than to obtain a knowledge of the science, till I came to read Combe's "Constitution of Man." Mr. Combe's candid, clear, and pointed manner impressed me favorably.

If his views in regard to Phrenology were correct, I thought I saw in his work a basis upon which all of man's relations with himself and with the world might be securely built. I determined to investigate Phrenology further; and so far as I have gone, I have seen nothing to discourage, but much to confirm me in its truthfulness.

I regret very much that a practical, tangible philosophy like that of the "Constitution of Man," had not been incorporated into my college curriculum. The dry metaphysical and hypothetical instruction which we receive at college might be advantageously replaced by a system of philosophy which places the finger of certain science upon all mental manifestations.

If instruction in regard to man in his physical relations also could take the place of much of the Greek and Latin, I doubt not the advantages of a college course might be still further enhanced. Let us hope that such a desirable end may yet be accomplished.

You have made my stay with you, Messrs. Wells and Sizer, most pleasant and profitable. For your kind and generous manner toward me, I thank you kindly.

RESOLUTIONS OF THE CLASS.

Whereas we, the members of the PHRENOLOGICAL CLASS OF 1873, desiring, at the close of our course of instruction, to express our regard for the utility of the subjects taught, and our appreciation of the ability and services of our teachers, therefore

Resolved, That we believe Phrenology, Physiognomy, Psychology, and Physiology are subjects of the first importance in the education and advancement of man, and the only true means by which we may arrive at a correct knowledge of ourselves and of our relations to our fellow-men, and to our God.

Resolved, That Prof. S. R. Wells has given us interesting and valuable instruction in Physiognomy and Psychology, and that his kindly bearing toward us, and his friendly counsel, merit our lasting gratitude.

Resolved, That Prof. Nelson Sizer, as a teacher of Phrenology and a practical delineator of character, is worthy our highest confidence and respect, and that his genial,

kindly, and sincere attitude toward us has made an impression that will never be forgotten.

Resolved, That having received from Dr. Nelson B. Sizer instruction in Anatomy and Physiology which will, to us, be of incalculable benefit, we desire to express our kind regard for him, and hope that his life may long be spared to advance the cause of science.

Resolved, That we are very grateful to Madame De Lesdernier for the instruction imparted to us in the principles of elocution.

Resolved, That we recommend to all students of Anthropology and its kindred sciences, the New York Phrenological Institute for its facilities in these important subjects, its instructors being gentlemen of noble and liberal minds, whose self-sacrificing devotion to their special branches of scientific inquiry can come only from a thorough conviction of their utility and truthfulness.

Resolved, That these resolutions be presented to the professors of the Institute, requesting their publication in the PHRENOLOGICAL JOURNAL.

REV. GEO. A. LEE, Pennsylvania.

G. E. CHANDLER, M.D., Ohio.

JAMES MCNEIL, A.B., New York.

EDNA H. SWIFT, Connecticut.

E. E. CANDEE, New York.

D. D. THOMPSON, Canada.

WM. RICHARDS, Pennsylvania.

C. L. SNELL, Pennsylvania.

J. H. MACKENZIE, Minnesota.

JAMES MCCREA, Illinois.

THOMAS CURREN, Michigan.

ORVILLE CURREN, Michigan.

F. E. ASPINWALL, New York.

S. F. PHILBRICK, Ohio.

PRENTISS M. GRANBERRY, Mississippi

"PEN AND INK PICTURES OF IRISH CUSTOMS"—"WAKES."

"CHRISTY CRAYON" CRITICISED BY JAS. ALEX. MOWATT.

THE article at page 64 of the PHRENOLOGICAL JOURNAL for January, under the above heading is, doubtless, interesting reading for the American public. It is a graphic and very humorous description of Irish "wakes," as they were conducted about forty years ago. If this had been stated in the article I would not have noticed it further. None of the scenes described by "Christy Crayon" could be witnessed in Ireland to-day, unless under very exceptionable circumstances, in exceedingly isolated instances, and in very backward districts of the country.

Knowing every portion of Ireland, as I do, and having been reared ("raised") in one of the most backward and mountainous parts of the island, in County Leitrim, near the source of the river Shannon, I have had the fullest opportunity of knowing the customs of our people, observing their habits, and sharing in all their practices so far as I pleased to do so.

It is admitted by "Christy Crayon" that

"some improvement in the mode of conducting 'wakes' and funerals is observable in Ireland." This is just what I assert has been the case for the last thirty years at least.

Many a "wake" have I been personally present at since I was seven years of age. I remember thirty-three years back distinctly. In all that time I never knew a "wake" to be "kept up for three or four nights." In no part of Ireland is the corpse ever kept unburied for more than two days. The "wake" could, therefore, be for two nights at most; and even one of these could not be of a very public character.

In England the corpse is usually kept in the house for five or six days without any public "wake;" but this keeping the body so long uninterred is never done in Ireland, and never was, even in the past; two days have always been the rule in Ireland.

"Dancing" I have seen at "wakes" on very rare occasions; but "never in the presence of death," as "Christy Crayon" puts it. I have known a large barn to be thrown open and lighted up for the young people at the "wake" to go into if they pleased for any amusement and pastime. There I have seen "dancing"—perhaps half a dozen times in my lifetime. And even on those odd occasions, when such has taken place, the Catholic clergy have publicly and openly spoken of it from the altar, and strongly condemned it.

Plenty of tea and bread and butter have formed the usual "refreshments" at "wakes," in Ireland, as long as I remember. And "Christy Crayon" will excuse me for stating that I can see nothing wrong nor objectionable in giving a cup of tea to friends who call, at a home of mourning, to show their sympathy for the family and their last token of respect for the deceased.

Tobacco and pipes are usually furnished in a room for all who choose to smoke. It is seldom, at present, that intoxicating liquors are served round to any extent. The temperance movement, under Father Matthew, and continued since, did much to break up that custom. Occasionally intoxicants are supplied; but it is very unusual for any one to be seen under their influence at "wakes" in the present day.

The National School System of Ireland was established by Act of Parliament in 1833—forty years ago. Since then common schools have been opened in every part of the country—the best schools, and the best system of teaching, in existence in Europe or America

to-day. These schools give "combined secular and separate religious instruction," to all classes and creeds in Ireland. These common schools have stamped out all the old scenes that used to occur at "wakes," just as the common schools have changed the character of American society.

The scenes depicted by "Christy Crayon" as taking place at a birth, and to the neglect and risk of the life of the mother, form entirely a fancy sketch. It would be wholly impossible to match them by reality anywhere. Acquaintances and neighbors who drop into a home where an increase has taken place in the family may be hospitably asked to join the family in a cup of tea. But to state that drinking, carousing, song-singing, and story-telling are carried on, "to the neglect of the weak and suffering mother," is entirely devoid of any foundation on which to rest.

These corrections of "Christy Crayon's" description of Irish "wakes" and births I consider it necessary to offer through the columns of the PHRENOLOGICAL JOURNAL, so as to preserve its reader from being misled in reference to a sensitive people who form one of the largest nationalities which go to make up the population of these United States.

WHAT PAYS THE BEST.—A writer in the *Journal of the Farm* remarks: I hear much discussion among farmers as to the comparative profits of different systems of farming. At one time the tide is claimed in favor of fruit raising; at another the dairy interest is ascendant; next we hear milk claim the precedence in profit over butter, and in the end we think it all amounts to this: That for no very great length of time will any one system, crop, or product remain more profitable than the other. Near market, milk will always remain the most profitable dairy product, not only because it can be carried far, but because its increased freight would soon absorb the difference in profit between it and butter. Farther from the consumer, butter will do best, because it can be carried a considerable distance, but also because the decrease in bulk very materially cuts down freights. At a still greater distance, cheese will take the lead, though the increase in freight over butter will somewhat retard it. Beyond this, the products of the farm can best find their way to market in the concentrated form of beef, mutton, and pork. It is claimed, with some show of truth, that milk and butter are more profitable than feeding beef. This is

only because they receive or work up much more of the proprietors' time and labor, as well as that of the family. Much more labor is expended, and it must make a more profitable commodity or its branch will stop. If the farm and family are adapted to dairying, it suits both best, and will prove most profitable, but it is only these extraneous causes which make the difference in profits.

MAPLE SUGAR.—The annual product of maple sugar in the United States amounts in money value to about \$7,000,000. This is no insignificant sum; while the quality of this sort of sweetness is much more palatable to most tastes than that of any other kind. Pure maple syrup, of the right consistency, and clean maple sugar, will always be preferred for domestic use over ordinary molasses, treacle, sorghum, or the manufactured chemical compound, sold under the delusive name of "golden drop." But why not increase the product of maple sugar? Why not plant maple orchards for this purpose? Why not, instead of holding large tracts of vacant lands for our children's children, why not leave them a magnificent forest of sugar maples? The tree is hardy and handsome; it is a free grower; it is clean; its wood is valuable for timber and for fuel; and it is not a vampire to the soil. It returns its foliage to enrich the earth, and is, in all respects, a most desirable tree. Planted by the roadside, how beautiful in summer as a shade tree! Plant it on steep hillsides, where you can not plough; plant it on rocky places where there may be soil for its roots, and it will reward the laborer for his care. Looked at from *any* point of view, it will pay to plant the sugar maple.

BEST TIME TO CUT TIMBER.—Dr. Hartig, who has made numerous experiments to determine the point, states that March and April are the best months in which to cut timber for building purposes, as it then contains its lowest per cent. of moisture, which he states to be 47 per cent. During the three previous months it has 51 per cent., and in the three following ones 48. He further states that properly seasoned timber should not contain more than from 20 to 25 per cent. of moisture, and never less than 10 per cent. If the moisture is removed to a still greater extent, the wood loses its strength and becomes brittle. An English authority states that if trees are felled as soon as they are in full leaf, and allowed to remain undisturbed until the leaves dry up and fall

off, the timber will be found well seasoned, the leaves having exhausted all the moisture in the wood.

WISDOM.

THE greatest men live unseen to view, while thousands are not qualified to express their influence.

THAT man is rich who has a good disposition—who is naturally kind, patient, cheerful, hopeful, and who has a flavor of wit and fun in his composition.

As the best writers are the most candid judges of the writings of others, so the best lives are the most charitable in the judgment they form of their neighbors.

A LITTLE word! a little word!

And joy in two young hearts dropped dead,
Alas, that it was ever heard,

Alas, that it was ever said!

A little word! The sun went down,

Then fell the ruin and the rain;

Love's happy fields were bare and brown,

And life was never bright again.

SENECA says that the great sources of anxiety in life are three: the fear of want, the fear of disease, and the fear of oppression by the powerful. He says that the last of these three is the greatest Seneca is about correct.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

THE man who had "a will of his own" didn't get on very well at home, because his wife had a "won't of her own."

A WIFE was enjoined by the doctor to give her husband all the delicacies she could procure, as there was no prospect of his recovering. "No prospect of his recovery?" said the loving spouse; "then what's the use of wasting dainty bits upon him if they won't cure him?"

A KANSAS City tombstone pays the following beautiful tribute to innocence:

"With a yell and a whoop
He died of the croup."

STRANGERS visiting Augusta, Me., while the snow was in the streets, were particularly cautioned not to kick any old hats they might notice in the path, as several citizens had had their heads seriously bruised in this way before they were dug out.

NEAR Rochester there is an eccentric old fellow who lives alongside a graveyard. He was asked if it was not an unpleasant location. "No," said he; "I never jined places in all my life with a set of neighbors that minded their own business so stiddy as they do."

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH *that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.*

QUESTIONS OF "GENERAL INTEREST" ONLY *will be answered in this department. One question only at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.*

CREDIT MOBILIER.—Did the Government lose anything in the Credit Mobilier frauds?

Ans. We are not aware that the Government *per se* lost, directly or indirectly, anything from this large scheme of congressional peculators and speculators. It is true that the Credit Mobilier was associated with the building of the Union Pacific Railroad, which great and really beneficial project had been largely subsidized by the Government; and it is doubtless true that a large part of the means contributed by the Government were made use of by those having the control of the railroad construction for their own private purposes. This, however, seems to be the rule in projects which are supplemented or assisted by the public through its state or national legislatures. The railroad was carried through to completion; and some claim that the Credit Mobilier scheme greatly assisted toward that final success.

FINGER-NAILS AND CHARACTER—"A True Friend" is impressed that the nails must indicate character to a greater or less extent, for the reason that they differ so much in shape and have so many different characteristics in different persons. Our correspondent is entirely right in the impression. Physiognomists find a good deal of meaning in the nail variations. Some people have long, slim finger-nails, associated, of course, with long, slim fingers; others have short and broad finger-nails attached to short and thick fingers. The first mentioned are much more significant of refinement and culture than the second. A "scrawny" character usually has a "scrawny" nail. We find persons who are jagged and erratic and incoherent with finger-nails which are also irregular and almost shapeless, so great is their lack of harmony.

CHRISTMAS TREE.—The origin of the exceedingly pleasant custom of erecting evergreen trees in the church and home, which the whole Christian world so much enjoys during the Christmas holidays, is traceable far back into remote antiquity. Some authorities claim that it was approximately derived from the custom prevalent during the Roman Saturnalia of ornamenting temples and dwellings with green boughs. The ancient Druids and other Celtic nations hung up green branches of different kinds over their doors. The Jews also used green boughs as a means of decoration in their feast of tabernacles. The manner of celebrating Christmastide forms an exceedingly interesting chapter in early English history.

DAY DREAMING.—They who are given to day dreaming usually possess a large cerebrum, mainly developed in the upward portion and lacking in the range of practical perception. We would advise such to withdraw as much as possible from the tendency to idealism, to take up some very practical pursuit—something which will force them to consider external objects. A business, if they could secure a position in it, like that of a retail grocery or hardware store, would encourage practical modes of thoughts, especially if a good deal of out-door life were associated.

JEALOUSY.—The young man who confesses this fault as one of no little annoyance to him, must appreciate the fact that his mental constitution induces it, and that he must avoid, as much as possible, all those associations and influences which serve to excite it. He must practice self-control. "He that ruleth his spirit is greater than he that taketh a city;" and if our correspondent can, by any means, keep under the activity of his strong Approbativeness and large Amativeness, it will prove a most happy triumph, and prove an earnest of a happy future. He is by no means alone in the possession of this unhappy trait.

DOGS GOING TO BED.—What is the reason a dog will turn around several times before lying down on his bed?

Ans. Dogs are governed by certain instincts, and, in the wild state, they are liable to lie down on sharp stubbs or stones unless they turn around to survey the ground. A horse rarely lies down in the field to roll, or to rest, without turning around, sometimes five or six times, in the same manner that a dog does. You may ask, then, why the dog, that has a sheep-skin with the

wool on it, or a buffalo-skin, or any other nice, soft bed, should thus turn around. The reply is, that he follows the instincts of his nature. He does not know why he does it, but is impelled to do it by instinct, because, in the wild state, it is necessary. The same instinct teaches the dog to scratch vigorously, as if he were covering up something, though he may be on a hard floor or a flat rock. His labor accomplishes nothing, but it answers the demands of his instinct, and perhaps may be regarded as a token of neatness. The squirrel will pretend to bury walnuts in the corner of a clean, tin cage; will go through all the ceremony of poking dirt on it, and patting it down, and, having finished, will retire contentedly.

MARRIAGE.—Is it commendable for a gentleman with dark hair and eyes to marry a light or blue-eyed lady?

Ans. Yes, it is just the way they should be mated. And those of medium complexion should marry with persons of similar complexion or temperament.

GIFT BOOK STORE.—If there is such a thing as a reliable "Gift Book Store" in the United States, please oblige me by giving me the address of one.

Ans. There is no "reliable" gift book concern in the United States. All that sort of thing is "played out," and some of the managers have been sent to State prison, where they will be obliged to work for a living. "Look out for swindlers."

WANTS TO GROW TALL.—1. At what age does a young man get his growth? 2. Are there any means by which one may increase his stature?

Ans. 1. One may continue to grow in height and weight to middle age; though one usually attains his height at from 24 to 30. 2. No; no other means than right living. Many persons are dwarfed by bad habits. Wrong living and dissipation "tell" on the part of parents, and "tell" on their progeny.

EYE CUPS.—We continue to receive letters inquiring as to the utility or inutility of these instruments, now being peddled about the country. Here is the opinion of a physician who understands the eye, in health and in disease:

"The only cases in which I could imagine those arrangements to do good would be in paralysis of the optic nerve, or other ocular structures, in aged people, and even then I should hesitate to use them.

"Their use in myopia, or shortsightedness, is nil; for the majority of myopes are so, *not* from any malformation of either the cornea or crystalline lens, but from what is called Posterior Staphyloma (dropsy), which could not be reached by any such arrangement or apparatus.

"Granting that a certain case was the result of a too much curved cornea, pressure might, with equal success, be applied to a piece of pure rub-

ber, as the cornea of the eye is very elastic, and its shape can not be changed without irreparable injury."

MENTAL SCIENCE.—What works on moral science, political economy, and mental philosophy do you recommend?

Ans. Among the works on Moral Science, Wayland; in Political Economy, Carey; and in Mental Philosophy, Combe's System of Phrenology. Combe's "Moral Philosophy" is excellent.

What They Say.

HUMAN ELECTRICITY.—In the February number mention is made of "Human Electricity" as exhibited by a correspondent as something remarkable. I did not suppose it to be so, having all my life witnessed such exhibitions. After my mother had reached sixty years of age, I have combed her hair, and it would crackle. All my sisters and brother were charged more or less. In my own case, in the summer time, on particularly cool evenings, I become so charged that my clothing will crackle and sparkle when taken off at bed-time. Even the blankets on the bed, when shaken out in the morning, snap and crack too, since cool weather has come.

My own idea of the effect upon the person so powerfully charged with electricity, is that of a life-lengthener. That a person who, in early life, was "full of electricity," with ordinary regard for the laws of life would live a longer life than one who was negative. My husband is more of a negative. I do not remember observing the presence of the fluid in very aged people or feeble persons. I know it is more powerful in myself, when in perfect health than when ill.

PATRONS OF HUSBANDRY.—MAYFIELD GRAVES CO., KY.—S. R. WELLS—*Dear Sir:* As you, in your JOURNAL, have to do with the elevation of mankind, and since the Patrons of Husbandry profess to be an institution of that kind (at least a great portion of them), you will please state your opinion of them and oblige an appreciative reader of your JOURNAL. * *

[We approve of all useful measures looking to the development of the race, by any and every proper means. If the P. H. have the same object in view, we shall be found working together. At another time we will take up the matter, and inform our readers more in detail of the special claims of the Patrons of Husbandry.]

"LOOK OVER AND BEYOND THE BACK-YARD."—A correspondent writes us some words of encouragement, in which he has something to say about young men and maidens who, he thinks, should strive to "step up higher, and look over and beyond the back-yard, which, at present, bounds their intellectual horizon." Alas!

how many there are, even in this enlightened Christian age, who still grope about in the darkness of ignorance, with no high aspirations, but live from "hand to mouth," from day to day, with no thought or care, for anything more than the gratification of their animal nature. A little Phrenology would do such persons great good, as it would open their minds to possibilities which, at present, are entirely above and beyond even their dreams.

MENTAL ORGANS; AND "THE TWO GREAT BOOKS OF NATURE AND REVELATION."—

Mr. Editor: In reading the work whose title I have put at the head of these words, I have been struck with the many new, and I may say wonderful ideas and theories which it contains. If they are all true, not only must the whole system of interpreting Scripture undergo revision, but all our ideas of Creation will have to be reconsidered. Many of the principles and laws of creative order are such, as while they startle by their novelty, nevertheless seem to carry conviction with them; and yet they run so counter to old-established ideas, and scholastic as well as theological teachings, that although I confess my reason is, for the time, at least, satisfied, my prejudices, or preformed opinions rise up in resistance and rebellion. How a writer, whose name, as far as I am aware, is unknown among the authors of the day, could have the boldness, or the courage, to pronounce—and that, too, so confidently, as if there could be no doubt of their correctness—ideas and opinions in such antagonism to those prevalent among religious denominations and schools of science, I am at a loss to comprehend. And what is the more surprising to me is, that they appear to be so well sustained by some of the ablest authorities in science, literature, ecclesiastical and secular history, and Scripture exegesis.

But his views on the subject of the *modus operandi* and processes of physical creation are the most startling; and the confidence with which he states them are no less to be wondered at. So far as I know he follows no known author, but strikes out an entirely new rôle; and there certainly appears to be a harmony and consistency in the whole theory, vast and comprehensive as it is. But what astonishes me most of all is, that I have seen no review of it! No criticism, even! At least in none of our leading periodicals, either religious or scientific; yet they do not usually pass over books of this character. I confess that I should like to see it reviewed; and if its statements or arguments are unfounded or sophistical, I should be a good deal relieved by seeing it made manifest, as I think it ought to be. But it is more particularly in regard to what he says on the subject of Phrenology that I desire to call attention; for on this he seems to have some peculiar ideas. The point to which I most desire to call attention is what Mr. Field says on this subject in "The Two Great Books of Nature and Revelation," at page 394: "And though the

mind is a unit when all these faculties act as a one, having one center, one end, and one common effort; yet, when divided one against the other, the intellect looking one way, and the feelings or passions another; or when Acquisitiveness is arrayed against Benevolence—or Self-Esteem against Veneration—then the house is divided against itself, and one faculty, or one class of faculties, rules over the others, by usurpation and dethronement of the divine order; or each faculty sets up an independent government, in which case the spiritual functions run into wild excesses and extravagances, not being influenced or sustained by the rational province of Assyria, or fortified by the scientific facts of Egypt; or there being no channel or medium for the river of the water of life to flow from the divine tree of life into these regions of the soul, and irrigate it with the vivifying streams of truth," etc. Now, if all the lower faculties were in order and subordination to the higher ones, would the mind be a unit? or, under any circumstances, a congeries of organs; and if so, then how can they be divided or multiplied, as they have been since the first nomenclature was made by Gall and Spurzheim? If you can throw any light upon this subject, as I have no doubt but that you can, it would not only be instructive to me, but I think must be useful to the cause of phrenological science.

And if your readers have not read what Mr. Field says more fully in relation to this subject in the above work, I doubt whether they will fully appreciate the force or the point of the extract I have made. AN AMATEUR PHRENOLOGIST.

"TIT FOR TAT."—In kindly noticing the PHRENOLOGICAL JOURNAL not long ago, the *Christian Advocate* remarked that though the JOURNAL was well edited, always interesting, and so forth, that the less Phrenology it contained the better. It occurs to us to inquire if the *Advocate* would not be improved by putting more general information and less sectarianism into its pages? Why feed Methodists, Baptists, Presbyterians, Roman Catholics, or Jews on dry doctrines, with which they are supposed to be already familiar? Why not exchange pulpits, brethren?

IN a notice of the December number of the PHRENOLOGICAL the *Chicago Inter Ocean* takes occasion to say: "It is close upon a century since the science of Phrenology took the world of London by storm, and created a revolution in the science of self-knowledge. Although people have quietly settled down to a sort of qualified belief in the correctness of Phrenology and Physiology, and man is content to form his estimate of human character through the instructive judgment of first impressions, and an observance of motions and actions, there can be no question as to the influence which this important subject exercises upon the estimate and formation of human character. This Journal has always maintained a high character for the excellence of its articles, the variety of its information, and the purity of its tone."

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

CHAMBERS' ENCYCLOPEDIA. Revised Edition, in ten volumes. Price, in cloth, \$5.50; leather, \$6. Philadelphia: J. B. Lippincott & Co., Publishers.

The one essential to every library is "Chambers' Encyclopedia," which is in itself a complete library—a universal dictionary of knowledge. The possession of the treasure is quite a fortune within itself; and should the home afford no other books, these great rich volumes—ten in all—would be sufficient to instruct an entire family. This work is the result of a hundred years and more, and it would require much space to mention half the varied features it possesses. The general character of the Encyclopedia is indicated by its title: a dictionary of names and facts. Its great attractions are the illustrative engravings and maps, with which the work abounds. It is expressly a dictionary of one alphabet, as distinguished on the one hand from a collection of exhaustive treatises, and, on the other, from a set of dictionaries of special branches of knowledge. In the greater number of articles are copious references to other heads with which they stand in natural connections; and thus, while a single fact is readily found, its relation to other facts is not lost sight of. The Encyclopedia is handsomely bound, and is sold at rates that commend it to all who can estimate its value or rightly appreciate the work required to compile this mass of information. Like the family Bible and the dictionary, an encyclopedia is a necessity, and households possessing it are happier and richer because of its presence, and wiser by far than can be estimated.

NETTIE LORING: A Tale of Christian Influences and Temperance Principles. By Elizabeth Downs, author of "Henry Maitland." One vol., 12mo; pp. 353; muslin. Price, \$1.25. New York: National Temperance Society.

This is almost a twin sister to the "Dumb Traitor." The author gracefully dedicates her little book, which is a labor of love, to her three brothers and an only sister. The book is beautifully published in the excellent style of the National Temperance Society.

ILLUSTRATED ANNUAL REGISTER OF Rural Affairs for 1874. 150 Engravings. 12mo; pp. 136. Price, 30 cents. Albany: Luther Tucker & Son.

We do not know another work of equal size, devoted to rural affairs, of equal merit with this. This is the twentieth annual volume, and contains, besides the gist of many volumes, over 150 engravings. The venerable J. J. Thomas, its "friend-

ly" author, keeps up with the times, and anticipates the wants of the farmer in houses, fences, orchards, live-stock, including poultry, agriculture, pomology, all indeed that relates to rural life, rural duties, and rural pleasures. It would prove a public blessing could copies be placed in every family in the State and the nation. Its insignificant cost is as nothing compared with its real value.

THE GILDED AGE. A Tale of To-day. By Mark Twain—Samuel L. Clemens—author of "Innocents Abroad," "Roughing It," etc., and Charles Dudley Warner, author of "My Summer in a Garden," "Back Log Studies," etc. Fully Illustrated from new Designs by Hoppin, Stephens, Williams, White, etc. Sold by subscription only. One vol., octavo; pp. 576. \$2.50. Hartford: American Publishing Company.

Its aim is to satirize the hasty way of making fortunes in these days of reckless speculation, and the well-known powers of satire of both authors combine to accomplish the object very effectively. The hero, an ambitious young man, unable to fix upon any mode of getting a living, fails in everything he undertakes; but his great perseverance is at last allowed to bring him success. However, the hero's virtue of perseverance seems to be his predominant trait, and, consequently, he is not so unlike the "plodding workers," after all.

LIPPINCOTT'S MAGAZINE. Illustrated. January, 1874. Vol. XIII., No. 73. Monthly; octavo; pp. 130. Price, \$4 a year; single copy, 35 cents. Philadelphia: J. B. Lippincott & Co.

This magazine is the favorite with many, since its contents consist of so varied a table as to suit many tastes. Its promises for the coming year indicate no failing of its usual attractions.

THE LADIES' REPOSITORY. Monthly. Octavo; pp. 78. January, 1874. Vol. XXXIV., Old Series; Vol. XIII., New Series. Price, \$3.50 a year. E. Wentworth, D.D., Editor. Cincinnati: Hitchcock & Walden; New York: Nelson & Phillips.

We always find much of interest in the the pages of this, one of the oldest of magazines, and are often tempted to quote some of the good morsels, of which there are so many.

THE POPULAR SCIENCE MONTHLY. Conducted by E. L. Youmans. No. 21. January, 1874. Octavo, pp. 132. Price, 50 cents a number, or \$5 a year. New York: D. Appleton & Co.

The table of contents for this number is as follows: Concerning Serpents—Illustrated; The Theory of Molecules; Past and Future of a Constellation—Illustrated; Replies to Criticisms; Quicker than Lightning; The Emotional Language of the Future; Genesis, Geology, and Evolution; Growth and Decay of Mind; An Episode on Rats; The Primary Concepts of Modern Physical Science; Sketch of Dr. J. W. Draper; Editor's Table; Literary Notices, Miscellany, Notes. Though the editor finds it in the line of his duty or his pleasure to oppose Phrenology, we forgive him on the ground that he may not understand it.

THE ECLECTIC MAGAZINE of Foreign Literature, Science, and Art. January, 1874. W. H. Bidwell, Editor. Monthly. Octavo; pp. 128. Price, \$5 a year. New York: E. R. Pelton.

This is the initial number of volume XIX., and bears the impress of the same vigor that accompanies a healthy young man approaching his majority. Its plan has always been to mingle amusement with instruction, which continues to be appreciated, as evidenced by an increasing list of subscribers.

THE BURGOMASTER'S FAMILY; or, Weal and Woe in a Little World. By Christine Muller. Translated from the Dutch by Sir John Shaw La Fevre, K.C.B., F.R.S. Price, \$1. New York: Scribner, Armstrong & Co.

This story was published some three years ago under the title of "Christine Muller," and is now first translated from the Dutch. It is an interesting story, nicely published, and served up in a handsome octavo.

ZOA RODMAN; or, The Broken Engagement. By Mrs. E. J. Richmond, author of "The Jeweled Serpent," "Adopted," "The McAllister's," etc. 16mo. Price, \$1. New York: The National Temperance Society, 58 Reade Street.

A temperance story, in twenty-five chapters, intended to warn young men of the dangers of dissipation. A capital book for the Sunday-school library.

WORK AND REWARD. By Mrs. M. A. Holt. 18mo. Price, 50 cents. New York: National Temperance Society, 58 Reade Street.

The author describes "A Dark Home," and its cause, Intemperance; "A Death Scene;" "A New Helper" comes upon the scene; "Good Resolutions" are formed; "A Rift" is seen in the clouds, and "Bright Prospects" are anticipated. Then comes "A Death Scene," and also "New Laborers in the Field," and at last victory crowns the efforts of work and brings its reward.

PETERSON'S LADIES' NATIONAL MAGAZINE. Monthly. January, 1874. No. 1, vol. XLV. Octavo; pp. 90. Price, \$2 a year. Philadelphia: Charles J. Peterson.

Beautifully illustrated, and well worth its price as a family magazine, containing instruction in a pleasing dress and manner.

ARTHUR'S ILLUSTRATED HOME MAGAZINE. Monthly. Octavo; pp. 76. No. 1. January, 1874. Price, \$2.50 a year. Philadelphia: T. S. Arthur & Son.

T. S. Arthur, the editor, is well known as a writer of Temperance and other good stories, all of which contain wholesome sentiments, which, if followed, would conduce to happiness and morality.

SCRIBNER'S MONTHLY. An Illustrated Magazine for the People. Conducted by J. G. Holland. Octavo; pp. 100. \$4 a year.

The January issue is No. 3, volume VII., contains about 130 pages, and is, as usual, filled with interesting reading matter, much of which is very fully illustrated. Here we find Texas made so much

like reality, that we should at once feel at home in San Antonio, just from looking at the pictures and reading their descriptions. Scribner is constantly improving and rising in public favor.

THE ATLANTIC MONTHLY for January appears in a slightly modified cover, otherwise the change of proprietorship is scarcely noticeable. An admirable list of reading matter by brilliant names indicates a purpose to maintain its high reputation as a literary publication. An exhaustive and very interesting article on the character \$, so common in our every-day life, is one of the number's attractive features.

THE LADY ELGIN is a lady's magazine, or, more properly, a monthly periodical of literature and general intelligence, edited and published at 50 cents a year by a company of ladies at Elgin, Illinois, namely, Madames Ellsworth, Richards, and Ahle. A beautiful pictorial number was issued for the holidays. The *Lady Elgin* has a circulation of 3,000 copies. It should be largely increased.

"**TRANSFORMED; A Story of Irish and American Life,**" is the title of a new tale which is appearing weekly in the *Boston Pilot*, from the pen of one of our contributors, Mr. James Alexander Mowatt. The story is thoroughly descriptive of Irish life and character as they really exist. The aim and purpose of the author is to teach the evils arising from the use of alcoholic liquor, the duty of personal abstinence and of national prohibition of the liquor traffic. All this is done by anecdote, dialogue, discussions, coroner's inquests, and sensational features, which lead the reader, unwittingly, to give his assent to all that is brought to be inculcated by the incidents in the tale. It will thus be seen that it is a story written with an object in view, of which object the author never loses sight. Temperance men and Prohibitionists ought to circulate it widely.

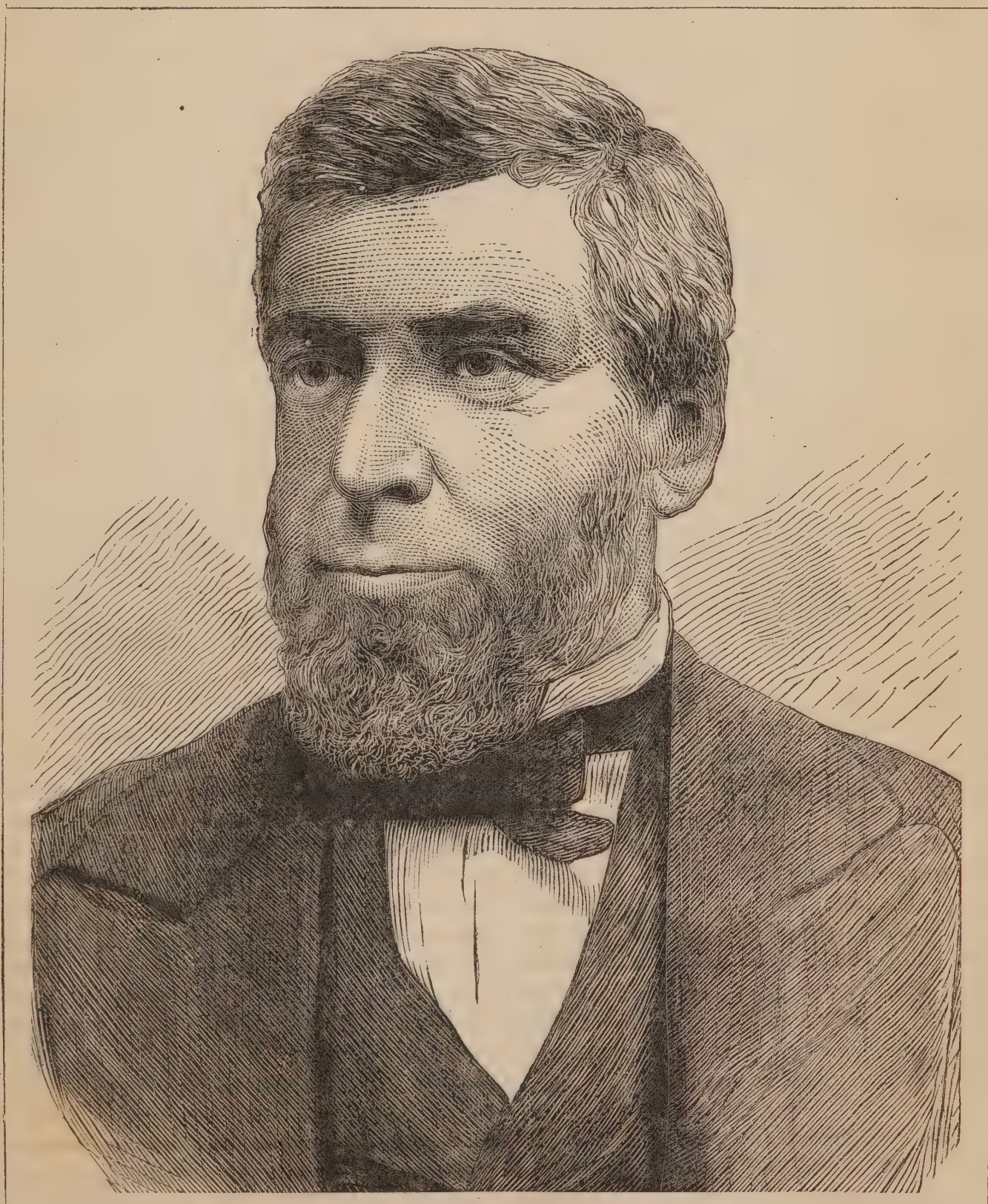
LITERARY CHANGES.—The *Atlantic* and *Every Saturday* have been purchased by Messrs. Hurd & Houghton, of New York. *Our Young Folks* goes to Messrs. Scribner & Co., of New York, and will be united with their handsome new juvenile, *St. Nicholas*. A Boston paper adds, "The change of owners will produce no change of character in these two periodicals. Mr. Aldrich will continue to fill *Every Saturday* with the choicest things from the English periodical press, and Mr. Howells will remain editor of the *Atlantic*. The unusually rich and varied programme announced for the magazine will be carried out just as if the familiar names of James R. Osgood & Co. were on the title-page." The *Church Journal*, of New York, noting this change, remarks: "We doubt whether anything can pass into the hands of Messrs. Hurd & Houghton without undergoing a change for the better. Bostonians may think the *Atlantic* incapable of improvement. But we shall see."

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[WHOLE No. 423.]



MORRISON R. WAITE, LL.D., CHIEF JUSTICE OF THE UNITED STATES.

MORRISON R. WAITE, LL.D.,

CHIEF JUSTICE OF THE UNITED STATES.

THIS gentleman, so recently elevated to one of the most responsible positions in the polity of our National Government, is a resident of Ohio, but a native of Lyme, Connecticut, where he was born about the year 1816. His father and grandfather were both jurists of good reputation in New England, and lived to advanced age. His mother was a Selden, a relative of the eminent judges of that name, who were also natives of Lyme, a little town at the mouth of the Connecticut River. He received a liberal education, graduated at Yale College at the age of twenty-two; and after a short period of study, under his father's direction, went to Maumee City, in Ohio, where he continued the study, and commenced the practice of law. In 1850 he removed to Toledo, where he was associated with S. M. Young, Esq., for upward of eighteen years in the practice of his chosen, we might say with much truth his hereditary, profession. As a lawyer he won a high position, and although repeatedly offered the candidacy for a judicial seat, he has heretofore positively declined.

In 1849 he was elected a member of the State Legislature, and served his term with much credit. In 1862 he was nominated for Congress, but suffered a defeat, notwithstanding the vote in Toledo was his by a very large majority. In December, 1871, he was appointed one of the counsel to the Geneva Commission, and acquitted himself with honor. To this service, it is probable, his recent appointment to the Supreme Bench is mostly due, although the honor was not at all sought by him. His nomination, as is well known, was confirmed by the U. S. Senate by a vote which is almost without a precedent, in that it was unanimous. This, considering the fate of the two previous nominations for the vacant Chief Justiceship, is remarkable. A *Tribune* correspondent wrote of the proceedings of the Senate when the subject was called up:

The nomination was discussed for about an hour, during which speeches were made by Mr. Sumner, Mr. Sherman, and Mr. Edmunds. The speech of Mr. Sumner is spoken

of as one of the best and most impressive which he has delivered in the Senate. While in no sense opposing the confirmation of Mr. Waite, he spoke with much feeling of the importance of the office and the great responsibility of the Senate, and paid a high tribute to the profession of law and to some of the great judges and lawyers of the past. Mr. Sherman spoke of Mr. Waite's high standing at home, and assured the Senate there was not a man in the world who had the respect and admiration of his neighbors to a greater degree than he. Not a breath of suspicion or reproach had ever been cast on him, and the Senator did not believe a man existed whose character was more spotless, or whose sense of justice and honor was more acute. He answered many questions propounded by Senators from time to time with reference to Mr. Waite and his character and abilities.

During the entire discussion not a word was said in opposition to the nominee, but nobody pretended that he was the greatest or most conspicuous and deserving lawyer in the country. The nomination was spoken of by all as creditable. When the discussion was ended, a motion was made to take a vote, and this was done, as an additional compliment to Mr. Waite, by Yeas and Nays, and the result was something which has rarely if ever occurred in the Senate. He received every vote cast, sixty-three in all.

He received the degree of LL.D. from Yale College in 1872, and in 1873 was chosen as President of the State Constitutional Convention of Ohio, not on account of his mere political services we may be assured, for, although a Republican in his leanings, he has not been an active partisan.

We are not altogether satisfied with our portrait of the Chief Justice. It does not fairly indicate the proportions of the brain in relation to the face, particularly as regards the lower jaw, which is somewhat exaggerated. He has, however, a finely-balanced temperament, the vital and motive elements contributing, in abundant measure, to vigor and strength in his mental opera-

tions, and enabling him to meet with ease and freedom, from irritation or fatigue, such draughts upon them as would utterly exhaust and break down men of ordinary physical endowment.

That is a fine head; large (said to be the largest among the great heads of Ohio), well-formed, and well-supported by a healthy body. The face is in keeping with body and brain. That is an amiable, though a decided mouth;

it inclines *up* at the outer corners, and the whole expression evinces intelligence; integrity, decision, hopefulness, self-respect, comprehensiveness, prudence, honor, dignity, and charity. He will rise in the public esteem as he becomes more intimately and generally known. *We* are satisfied with our new Chief Justice, and shall look for such decisions as will be approved of all good men, and, may we say it, in the courts above.

OBLIQUITIES OF CHARACTER—THEIR USES.

BY JNO. S. BENDER.

THERE are some features in the character of every man who asserts his individuality which may appear to the world at large to be real defects. Yet were these seeming blurs erased, the individual would have little character to assert. These outcroppings are but the indices pointing to the genus to which they belong, and are by some termed peculiarities. These peculiarities are by many good persons regarded as follies, or something that tarnishes the good name of the possessor; but to every observer of human nature it is apparent that these eccentricities, or whatever the world chooses to call them, can not be dispensed with without robbing the individual of that which gives him identity among men. These points of divergence in character from that of men generally, may annoy the student of human nature at first glance; but by careful investigation he will soon be convinced that if they have not been produced by a perversion of character, to eliminate them would be to despoil the individual of his usefulness.

The chestnut tree produces a deliciously-flavored nut, but it is incased within a hull that may wound the hand that touches it. All admit the nutritive qualities of the nut, but forget that it could not mature without this jagged exterior. The rough burr is the peculiarity of the chestnut, and there is no use of philosophizing upon a method to raise them without burrs. Chestnuts won't grow in any other manner. When fruit is produced that matures in a smooth hull, it will not be chestnuts.

To carry the simile still further: Many of

the insectivora of the animal kingdom have exceeding long antennæ which appear useless, yet the entomologist will tell you that they could not be trimmed off no more than man could give up his fingers, without injury.

The peculiarities of men are generally ridiculed; they ought not to be—these are his antennæ, his jagged exterior, and beneath this rough casement may lie a mind more valuable than gold. Much of the want of harmony in society, and many of the annoyances of life proceed from these outcroppings of character, yet, strange as it may appear, it is that which should produce the greatest amount of good—the greatest delight to members of society. “Variety is the spice of life.” The ostrich is a remarkable bird, yet no one who visits a museum would be satisfied to view the ostrich all the time.

Why does diversity of character produce discord? On the principle that a tender-footed man can not walk over chestnut burrs without hurting his feet, or a nude one be thrown into a brier-patch without getting scratched. The former should have on his shoes, and the latter be clad for the occasion. He who rushes indiscreetly against the eccentricities of another, is little wiser than a naked infant sporting in an osage hedge.

Many good wives find peculiarities in their husbands' character which they wish eliminated; if from an ill-formed habit, they are right; if natural, don't pluck them out, it would ruin the man. Husbands, if the wife be naturally imperious in temper, don't try to rub it out. Should you succeed you

may have to nurse a sickly spouse. Remember that a healthy cactus is more beautiful than an unhealthy quince.

Every species of animated nature flourishes and excites our admiration when perfect in all its parts. This will apply to character also. The only safe rule to govern companions who have thorns in their character is, handle them carefully; deal gently with them. The same will apply to society at large. Many persons find fault with Xantippe, because they say she was a pattern of a scold, yet I have no doubt were we now copying from the old philosopher's notebook his opinion of his memorable spouse, it would run about thus: "I now want it to go down as my apology for her to future generations, who I think will be more charitable than our contemporaries, that while I was

almost gratuitously instructing my countrymen in the philosophy of the times, my dear wife (Xantippe) was crying for something to eat."

What I most particularly wish to inculcate by this lesson is, every useful person has some angularities, and we have no right to grumble at them. If we must deal with such, it should be with caution. Most times we are injured by such; it is our own fault. If we are handling sharp-edged tools, it should be with care. An excellent razor becomes a blessing, a dull one a curse. A dull man or woman is laid by to rust. The sharp man or woman has demands upon him or her every day, and will never be "laid upon the shelf;" and if we do not want to get hurt by such, we must deal with them gently.

SPURZHEIM AND OWEN IN 1827.

IN the *Atlantic Monthly* for November, 1873, Mr. Robert Dale Owen published an interesting article made up of sketches of eminent persons with whom he had had friendly relations in London forty or more years ago. This article possesses features particularly inviting to the friends of Phrenology, as a good part of it is devoted to the author's brief intimacy with Spurzheim; and certain details connected with the phrenological methods of those days are given which are valuable as confirmatory evidences of the truth of the system. Mr. Owen writes:

I met Dr. Spurzheim at the house of Mr. Martineau (father of Harriet); I listened to him with eager attention, and expressed to him in strong terms, ere we parted, the deep interest I had felt in his conversation. He smiled, and cordially invited me to visit him in his studio. When I called, he gave up to me an entire forenoon, and seemed to take good-natured pleasure in showing his collection of casts and skulls, and in explaining the first principles of his system. His candor, modesty, and simple methods of illustration impressed me at once in his favor. How devoid of pretension, how free from all dogmatic assertion, was the master, compared to some of his half-fledged disciples whom I have since met!

He brought me the cast of a head, having taken the precaution to cover up the features with a cloth, and asked me what character I should assign to the original. I answered

readily that I should suppose him to be a wise and intelligent man. Then, with similar precaution, he produced another bust, which, at a glance, I pronounced to be that of an idiot.

"You are right in both cases," he said. "You see, then, that, without any previous research, you instinctively detect the extremes. I pretend to nothing more, after years of careful study and the examination and comparison of many thousand skulls, than to be able to detect, in detail, some of the minuter indications of human character."

But, though his mode and manner won me; though I perceived also that he was anything but a man of one idea; though I knew it was admitted, on all hands, not only that he was an excellent anatomist and physiologist, but that his analysis of the mind—the division of its powers and attributes into the various propensities, sentiments, perceptive and reasoning faculties—evinced a careful study of mental philosophy; yet in that first interview I was able to assent only to a few general deductions; as that the frontal organs correspond to the intellectual powers; the sincipital, to the moral sentiments; the basilar, to the lower propensities. I could follow him when he went on to affirm that when the mass of brain contained in the basilar and occipital regions is less than that contained in the frontal and sincipital, the man, as a general rule, is superior to the average of his fellows; though it is to be con-

ceded that too great a disparity indicates a lack of animal energy—often a serious deficiency. Nor did I dissent from his opinion, that, take the average heads of mankind, savage and civilized, in our day, the basilar and occipital masses of brain exceed the frontal and sincipital; a fact, it seemed to me, to which my good father was not wont to give sufficient heed.

The theory of craniology, however, in its details, struck me, on this first presentation, as vague and fanciful; and when Dr. Spurzheim, as I took leave of him, said that if I would call on him again, he would give me a chart of my head, I resolved, in partial satisfaction of my doubts, to try an experiment; and since one purpose of an autobiography is to furnish to its readers materials for a thorough acquaintance with the autobiographer, I shall here chronicle the result of that experiment, at expense, it may be, of incurring the charge of egotism.

There was at that time in London a Mr. De Ville, a lecturer on Phrenology, a man of limited literary and scientific knowledge as compared to Spurzheim, but an industrious and critical observer, who had made the best collection of casts and skulls in England, larger, even, than that of Dr. Spurzheim himself. To him I went; and finding that he furnished to visitors, for a moderate compensation, a written statement of their cranial developments, I asked for mine. As soon as I received it, I went straight to Dr. Spurzheim to pay him my second visit; obtained the promised chart from him also, without showing him De Ville's, and brought both home to compare them. They coincided much more nearly than I had imagined they would.

The degrees of comparison indicated were five: 1. Predominant; 2. Large; 3. Rather large; 4. Full; 5. Small. I have before me Spurzheim's estimation, with De Ville's added in parenthesis whenever there was a variation of opinion, which I here copy—

1. ORGANS PREDOMINANT.

Benevolence.
Conscientiousness.
Adhesiveness.
Causality.
Comparison. (D. V., 2.)
Firmness. (D. V., 2.)
Love of Offspring. (D. V., 2.)
Love of Approbation. (D. V., 2.)
Locality. (D. V., 2.)
Eventuality. (D. V., 4.)

2. ORGANS LARGE.

Ideality. (D. V., 1.)
Constructiveness. (D. V., 1.)
Individuality. (D. V., 1.)
Form. (D. V., 1.)
Destructiveness. (D. V., 3.)
Amativeness.
Self-Esteem.
Language.
Size.
Imitation. (D. V., 3.)

3. ORGANS FULL.

Acquisitiveness.
Melody.
Secretiveness. (D. V., 5.)

4. ORGANS MODERATE.

Caution.
Hope. (D. V., 2.)
Veneration. (D. V., 2.)
Calculation. (D. V., 3.)
Combativeness. (D. V., 3.)
Time. (D. V., 3.)

5. ORGANS SMALL.

Inhabitiveness.
Marvelousness.
Color.
Wit. (D. V., 4.)

Thus, with a range of five figures indicating size of organs, it will be observed—

That thirteen out of the thirty organs examined correspond to a single figure.

That thirteen more differ a single figure only.

Therefore that there are four organs only, out of thirty, as to which the variation is more than one degree out of five, while only one of these differs more than two figures.

Four organs were set down by both examiners as dominant; namely, Benevolence, Conscientiousness, Adhesiveness, Causality.

Five were set down as very large by Spurzheim, but as large only by De Ville; namely, Firmness, Love of Offspring, Love of Approbation, Comparison, Locality.

Three were set down as very large by De Ville, but as large only by Spurzheim; namely, Ideality, Constructiveness, and Individuality.

At home, before visiting De Ville, I had questioned my conscience and set down, as honestly and accurately as I was able, my own estimate. It corresponded, in a general way, to the above, except that I had not felt justified in naming more than one organ (Adhesiveness) as predominant, and had rated the others which were esteemed predominant by Spurzheim and De Ville as large only.

I incline to the opinion that Spurzheim was right in giving me somewhat more Firmness^{*} and Comparison, and somewhat less Ideality and Constructiveness than De Ville; and that, on the other hand, De Ville was right in giving me somewhat more Hope, Veneration, and Form (especially Hope), and somewhat less Imitation and Locality, than Spurzheim. As to Eventuality (the only organ in which there was a variation of three figures), I think the truth lies between the two.

The substantial accordance between these two charts of character gave me somewhat increased confidence in the phrenological mapping of the skull. The fact that the character thus ascribed to me was a good one may very likely have tended to influence my judgment in the same direction. The readers of this autobiography, if I live to complete it, will have the means of judging, to a certain extent,

how far the two best phrenologists then in England succeeded, or failed, in deciding correctly in my case.

I am afraid that if the above should fall into the hands of some good people with conservative tendencies, who know me by report only, it will weaken their faith in Spurzheim and De Ville's sagacity as phrenologists. I speak of those who may have thought of Robert Dale Owen as a visionary dreamer, led away by fancy into the region of the marvelous, there to become an advocate of the wild belief that occasional intervention from another world in this is not a superstitious delusion, but a grand reality. To such persons the assertion in which both these observers unite—namely, that Causality, or the reasoning power, is a predominating faculty in my brain, while Marvelousness is one of its smallest organs—will appear incredible.

Department of Religion and Psychology.

Know,

Without or star, or angel, for their guide,
Who worships God shall find him.—*Young's Night Thoughts.*

The soul, the mother of deep fears, of high hopes infinite;
Of glorious dreams, mysterious tears, of sleepless inner sight.—*Mrs. Hemans.*

IMMORTALITY CONSIDERED PHYSIOLOGICALLY.

BY R. T. TRALL, M.D.

TWO theories exist in the religious world in relation to the doctrine of immortality. One theory recognizes the immortality of the soul distinct from the bodily organization or, at best, from such a bodily organization as exists in earth-life. The other theory is, that the "redeemed" are to possess the earth immortally with the same, or exactly similar, bodily organizations as they possess on earth. The familiar scriptural quotation, "This mortal shall put on immortality," is claimed by each party to prove its theory, as is St. Paul's beautiful illustration of the resurrection. The former theory assumes that, in the article of death, the soul is disconnected from its earthly tenement, and, clothed with a spiritual body, immediately enters on its eternal destiny. The purgatory of the Roman Catholics is only a modification of this theory. The latter theory assumes that all who are so

fortunate as to be in the category of "Saints," are to be in some manner resurrected or recreated (after sleeping in the grave until the "Second Advent," or "day of doom"); that then the earth is to be remodeled, purified, and beautified, for their eternal habitation, and that God will rule over them personally, receiving everlasting adoration and praise from them.

I shall not undertake to prove nor disprove either theory in this paper, but consider simply the question of immortality itself. How is this doctrine to be proved or disproved? One will answer, "By revelation;" but another will ask, "What is revelation?" And here the theologians disagree. One says the Bible settles the problem that man is immortal. But there are differences of opinion among eminent biblical scholars as to its teachings on this subject. Some theologians assert that the Old Testa-

ment nowhere teaches the doctrine of immortality, and that the ancient Jews never intimated such faith. Nearly all clergymen and commentators agree that the New Testament teaches the doctrine. But we must leave these questions to the theologians, while we interpret the Book of Nature.

The material sciences afford no ray of *direct* light on the subject. But as they demonstrate the existence of things beyond the recognition of our senses, they afford therein a presumption of immortality. Science renders it *probable* that a drop of water contains more than two millions of molecules; that a spark of electricity, or a flash of lightning, visible to the naked eye, occupies less time than the millionth part of a second; that chemical atoms vibrate hundreds of trillions of times in a second; that all space is pervaded by an ether or substance, so fine or subtile that the spider's thread, composed of four thousand strands, and just visible to our unaided sight, is like the huge California trees in comparison, and numerous other things as amazing and incomprehensible. Surely a spiritual or soul existence of substances, as much more refined than our present tenements of clay, and utterly incomprehensible to the mind through its present bodily instrumentalities, is quite as supposable as are the similar suppositions in relation to what is termed "gross matter," and its properties.

We seem to have no better, indeed no other scientific basis for investigation than ourselves; and this brings us to the fundamental premise in this discussion, How are we related to the other things of the universe? This proposition, so simple in statement, is very complicated in its implications, for it involves several problems, concerning each of which many books have been written. What is life? Whence does it originate? What is mind? soul? spirit? What is the nature of either? What its relation to matter?

Until the materialist can explain the nature of an atom, molecule, or "mode of motion," he can not properly demand of the metaphysician to demonstrate the nature or essence of soul or spirit. Whether an atom has any existence as an entity distinct and separate from motion, is as vexed a question

among the scientists as is that of the spiritual philosophers, whether soul can exist independently of what our senses recognize as organization.

Professor Tyndall adopts the atomic theory, and assumes that all matter is referable to primary self-existent atoms. Professor Le Conte, on the contrary, meets the issue with the somewhat startling proposition that "nothing exists in any by itself," and raises the question for debate whether "reality is absolute?"

The word soul is employed in various senses in the Bible, as well in common conversation, as mind, spirit, person, disposition, nature, etc. In this article I shall employ it only in the technical sense, as synonymous with spirit, and to mean whatever there is in and of humanity distinct from the bodily organs and structures which are cognizable to our senses; or, in other words, whatever it is that is manifested through the brain substance.

All metaphysicians and all physiologists agree that the brain is the organ of mind, although all do not concur with the phrenologists that the brain consists of a plurality of organs. All agree that the brain is the seat or medium of mental cognition—thoughts and feelings. It is universally admitted that the brain is the medium through which the *ego* or person, or soul, is manifested, mind being the aggregate of its manifestations, whatever may be the nature or essence of the soul itself—a problem the phrenologist may safely agree to explain as soon as the scientist will explain the nature and essence of the primary atom, molecule, or motion.

The evidence that soul exists is, therefore, precisely the same as the evidence that matter exists. Our senses can take cognizance of neither in its essence. We know nothing of either except in its relations and effects. There is as much evidence of the entity or independent existence of one as the other, and to affirm that spirit results from organization, is just as unphilosophical as to affirm that organization results from spirit. Indeed, as the higher includes the lower as a law of the universe, it is a thousand times as probable that spirit organizes matter as it is that matter organizes spirit. Does the house build

the tenant, or does the tenant construct the house? In the relations of living and dead matter, the living *always* is active and the dead passive. No physiologist has ever traced vitality to any other origin than a living being or germ; nor has any psychologist ever traced soul to any other origin than prior existing soul. But, as all admit the mere existence of soul, the only question is, does it exist forever?

And here again Phrenology meets the scientist on his own grounds. Does matter exist forever? The scientist says nothing can be destroyed. Then it follows that the soul can not be annihilated. Matter *must* exist somewhere in some form. So *must* soul. If matter is uncreated and indestructible, and only individualized in form, so is soul. This is individualized in persons. Both are immortal and eternal—one as matter, with physical properties, and the other as living beings, with vital and mental properties.

But the confusion on this subject is mainly attributable to a want of a clear distinction between physical, chemical, vital, intellectual and moral powers or properties—distinctions nowhere found in our college textbooks.

The mineral kingdom possesses physical and chemical properties. The vegetable kingdom possesses vitality. The animal kingdom possesses vitality and mentality. The human kingdom possesses vitality, mentality, and *morality*. The latter quality is peculiarly human, and distinguishes man from the animals. Man is not, therefore, a "higher animal."

Whence are these properties, qualities, or powers derived? Keeping in mind the law which all educated men recognize, that the higher includes all below it, how can we imagine for a moment that soul is derived from matter? The reverse may not be demonstrable, but it is certainly conceivable.

No matter about Darwinism and evolution. This may be true or false without affecting the real question in issue. If Darwin eventually succeeds in demonstrating the "descent (ascent?) of man," it in no way disturbs the evidences in favor of immortality, whether we seek them in the Book of Nature or the Book of Revelation. Indeed, I think the doctrine

of evolution is distinctly and correctly indicated in the first chapter of Genesis. The works of creation are there mentioned in the following order: Heaven and earth, light, firmament, herb, fish, fowl, cattle, man, and this is substantially the order in which all naturalists have *evolved* their histories of geology and animated nature.

Suppose we suppose for a moment what is not supposable, and admit the self-evident absurdity that a certain arrangement or combination of the elements or particles of inorganic matter can produce vitality in the vegetable kingdom; and a new or further combination or arrangement mentally in the animal kingdom? How are we to account for the *morality* of special endowment of the human being? Where and how does this become "evolved?" Granted that life, feeling, and thought are "modes of motion," properties of matter, results of organization, we are not any nearer a material solution of our problem. Life, feeling, and thought may each and all relate to and have their uses and ends in this state of existence. Plants and animals live, develop, grow, decay, and perish, with no thought of or preparation for anything beyond the season. There is no trace of anything moral in their natures, in the religious sense of the word, or in its relation to an endless existence. Why not?

And just here is the physiological and the only philosophical basis for the doctrine of immortality. It is found in the group of phrenological organs termed Hope, Conscientiousness, Ideality, Benevolence, and Spirituality. All other mental powers the higher animals have in common with man; some of them in a merely rudimentary state, others even more fully developed, comparatively, than in the human being. *And this distinction proves the immortality of the soul.*

We can all see and understand the uses of vitality and mentality for the varied purposes of *this* life; and these are all the powers needed or useful for an existence which is to terminate with the death of the body. They answer all purposes of development, growth, and reproduction. And if man perishes like the plant and the animal, why the superaddition of powers that have no relation whatever to development, growth, and reproduction, but do relate him to some-

thing upward, onward, distinct from, and in opposition to, the laws and conditions of material organization, however vague and mysterious may be that something?

Physiology intimates immortality; Phrenology demonstrates it. Let those who deny

the doctrine meet these testimonies, "and say why Heaven has made us as we are," if they can. Let them tell us why, for the purposes of this life, we need, in addition to domestic and social organs, the moral powers?

TASTES AND TEMPERAMENTS A REASON FOR DENOMINATIONS.

BY REV. THOMAS E. BABB, IN THE CHURCH UNION.

HERE are clerical utterances which will seem new to other than phrenological readers. It has been the practice for years of delineators of character to classify men—total strangers—by their organizations. They would say to this one, "*You* are largely developed in Conscientiousness, and in Destructiveness, with moderate Benevolence, etc., and *your* God delights in 'punishing the wicked.'" To another he would say, "Your Conscientiousness is not so large, while your Benevolence greatly predominates. *Your* God is all-merciful, and delights in saving everybody." To another he would say, "You are a good believer. Faith is your leading trait; and you affiliate with that body who believes with or without reason;" and so on. Indeed it is not a difficult task for a good phrenologist to indicate who is a good specimen of the fire-and-brimstone sort, and who is the opposite; who is Roman Catholic, Episcopalian, Presbyterian, Baptist, Methodist, Unitarian, Universalist, Swedenborgian, etc. Of course many will be found with no special proclivities toward any religious order, while those well-grounded in *any* doctrine will show it more or less in the development of the head, face, and character. Is there no difference in the heads—full-grown—of Roman Catholics and Israelites? between Presbyterians, Methodists, Swedenborgians, Lutherans, Mormons, Shakers, and the rest? There are differences, and they may be pointed out. But to the article proper.

A fact like the existing variety of denominations, of course, has a history. There has been a time when each denomination began to exist, and there was a cause for its rise. This history is usually traced by referring to some doctrinal discussion, which ended in the separation of those who could not bury

their bones of contention and live harmoniously together. A professor of ecclesiastical history will readily account for the present diversity of denominations on this score, and perhaps will justify the variance on this ground.

But whether this is the true cause or not, it is not in this way that Christian people in general seek to justify denominations. Much oftener they put them on the ground of various tastes and temperaments. Men prefer different methods of worship. Says a quiet Quaker, or a congealed Congregationalist, "Pray, how could I worship with your ranting Methodists? They are good, no doubt, and I have no objection to allowing them to worship as their feelings prompt. Let them roar, if they think that their God is on a journey, or sleeping; but let me worship in my own quiet way." Says an ardent Methodist, "Compel me to become a Presbyterian, if you wish to freeze me; but if you are willing that I should worship God, pray, let me shout His praise when His praise wells up in my heart. As for me, I prefer to walk with those whose hearts burn in them, while Jesus talks with them by the way." People of all denominations say, "Why, there are diverse tastes and temperaments in the world, and people, when they come into the church, are molded by very different educations; if we put all indiscriminately together, the feelings of all will be shocked, all reverence will be taken away, and we shall defeat the very ends of worship."

In all this there is, doubtless, much truth; yet it fails to reach the root of the difficulty. How do these strongly varying tastes happen to exist? Are these extreme temperaments natural and necessary? Does yielding to

their fastidious demands produce the best effect upon them? These are proper questions to ask; and a little thought on the subject will reveal the truth that denominational divisions are, to a great degree, accountable for the extremely exacting nature of men's peculiar temperaments, and are just the thing to foster the evil, and make perverted nature triumph, instead of correcting grace. Where denominational sin abounds, grace does much less abound; for the very act of yielding to the selfishness of nature casts out grace.

Suppose you have two boys, one rough and boisterous, the other gentle. The former seems by nature to be coarse in his tastes and somewhat lacking in refinement of feeling, while the other shows a natural susceptibility to culture, and even fineness of texture without it. "Send them away to different schools," you say; "the former to a school suited to his tastes, the latter to one of culture. How can they be expected to associate?" you ask. "Their natures lead them in different directions." Very true! and the longer they live separated, the more they will probably diverge. And why? Because, with these different bents in the beginning, you now propose to surround them with influences which tend to intensify the dispositions which are native to them. Would not the rude boy be improved by instruction in gentle ways? And would the quiet one be injured if he were made more demonstrative—a little bolder? Going each in his own way, these boys will become abnormally developed in opposite extremes. How will it do to keep them together? Bring them both home, and what will be the result? Everything beneficial. The first will draw out and strengthen the latter; and the latter will tame down the former.

Just so it is with denominations. It can scarcely be questioned that some are more boisterous than it were well for them to be. These are ranters. But why? How did they become such? Why, by ranting; and being allowed to go off by themselves and rant, and rant on. Nothing in their doctrine made it; nor can half of their boisterousness be charged to taste or temperaments; it is chargeable to the unbalanced education of

denominationalism. They have none of that subduing grace which would come from association with more quiet worshipers.

On the other hand, there are stiff, unemotional worshipers, who are shocked by the presence of anything which approaches to ranting, even a single shout of "hallelujah," or "amen," from one whose heart is aglow. These are as much in fault, just as much, as the ranters. But why are they so cold? Because, by denominational separation, they are thrust by themselves to mope, and mope on. Yet a half of their lifelessness is not to be laid to the charge of nature; it is the result of the unbalanced education of denominationalism. Indeed, it is a serious question what will become of Methodists, Presbyterians, Episcopalians, Baptists, if shut up to themselves. It deprives them of that balance which God supplies to man largely as the happy results of various temperaments associating with each other.

Now, what if denominations had never existed? What if the family had never been broken up by sending the children off to associate according to tastes, and putting only similar temperaments together? The result would have been good, without doubt. That neighbor of yours, whose roaring is so offensive to you, would not have been such a roarer, by the Grace of God, through you; and by the grace which you would have received through him, you would not have been so inordinately afraid of a little roaring. Indeed, you would have been a little more reasonably inclined that way yourself, and hence not quite so great a provocation to your neighbor to be crying out to you, "Awake! thou that sleepest, and arise from the dead."

Surely this separation into denominations has been a most unphilosophical proceeding. Men, women, and children are not as good Christians as they would have been without it. Left to themselves and those who are like them, they have gone to extremes in doctrine, in mode of worship, in bias of character. They have made themselves one-sided and clannish. A member of a Baptist church who was in trouble in his church, yet felt that he could not leave peaceably, because the place had no other Baptist church, lately told his difficulties to the

writer of this. His reply was, "then quit being a Baptist, and be a Christian." The Baptist replied, "I can't see it in that way; I am a Baptist." One of the greatest evils

in the churches to-day is that denominational lines have made men love their own clans better than the flock, their cramped little pens better than "the fold."

Department of Ethnology.

True Christianity will gain by every step which is made in the knowledge of man.—Spurzheim.

ARCHÆOLOGY IN AMERICA.

THE MOUND BUILDERS, WITH ILLUSTRATIONS.

BY A. L. RAWSON, A.M

THERE may be honest differences of opinion among scientists as to what degree of intellect a certain skull indicates, as in the case of the Enghis skull, which is said by Huxley to have been that of a man of good average intellect, while Professor Vogt believes it must have belonged to a man of very low capabilities.

It is not fair to assign the whole Mound Builder race to a rank below even the Hottentot or Australian, as was done by the late Professor Foster, because of their small heads and rude specimens of the arts, for they may have been as capable of good works as the men among us who have small heads and still escape classification among the lowest races. Their art works compare very favorably with those of men in the corresponding ages in Europe and Asia. (See figures 26 to 40.)

The great results achieved by the Peruvians followed from their having well-balanced brains; the small results of the red men, who have a much larger brain, are due to the overpowering animal propensities and passions.

It is also unfair to class them with children and their works, for men, even in this age, de-

north of the lakes, because of his unconquerable dislike to mechanical improvements.



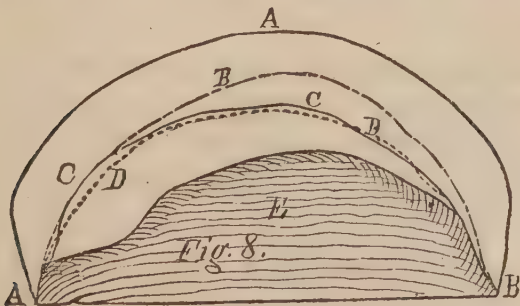
SCHILLER AND ESKIMO. (Repeated.)

From what remains of them in the United States, and more especially if the magnificent cities of Central America are included among their works, we are justified in assigning them a place almost next to the white races, certainly next to the East Indians and Egyptians. If tried by the design and execution of their public works, they command our respect and admiration; if by their tools, they fall little short of the white races of the same age of the world; if religion is the test, they compare favorably with any race of which we have definite accounts.

Some ethnologists have supposed they were successors to the Central American Palace and Temple Builders, but the proven identity (craniological) of the Mound with the Temple Builders answers that query. The Indians drove out the Mound Builders who emigrated to Central America and Mexico.

It has also been supposed that the course of navigation was from the Antilles west and north. This probably arose from the fable of Atlantis; and the advance in culture made by the same race in Yucatan, after leaving the States in the north, is quite conclusive as to the southern course of the migration. (See figures 34 and 26.)

In cut No. 8 there are several outlines in one group comparing the white (A) with the Mound

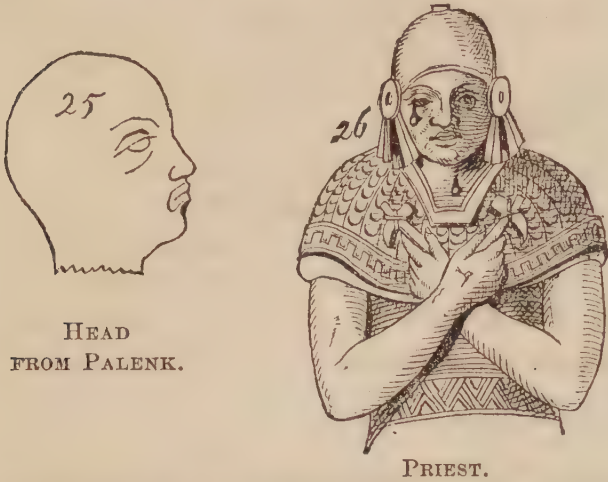


CHIMPANZEE AND MAN. (Repeated from Feb. number.)

prived of metal tools, domestic animals, and the knowledge of their uses, would make but poor progress. The red man makes the most primitive mats, or any other article for comfort,

Builder (B D), the pre-historic European (Neanderthal (C), and the Chimpanzee (E).

If difference in form and size can determine the place in the scale of the several races, we



have here in these outlines evidence of a respectable position for the Mound Builder as compared with his pre-historic fellow-man of Europe, and a very great difference separating man from the ape. Compare Schiller the poet with the Eskimo (in figures 20 and 21), the dotted line for Schiller. There is only a thin stratum of difference between a fine poetical genius and a savage; the difference between the savage and the brute is still greater, and scarcely to admit of comparison. The crania from the shell heaps on the coast of the Gulf of Mexico and rivers near it are larger than those found further north—perhaps larger than any of the Mound Builders, the brain case averaging nearly 84 cubic inches, and they are not deformed, being massive in form and having thick, strong walls.

To give the student an idea of the relative position of the Mound Builder in the scale of humanity, the following tables of measure-



ments are compiled. Those from foreign countries are by Huxley; from the United States by Dr. B. A. Gould; those of the Natchez and

from Yucatan from my own measurements; the Mexican by a medical student from there attending lectures here. The average capacity of 21 Mexican skulls was 79 cubic inches, and the general average of the Peruvian is 74.

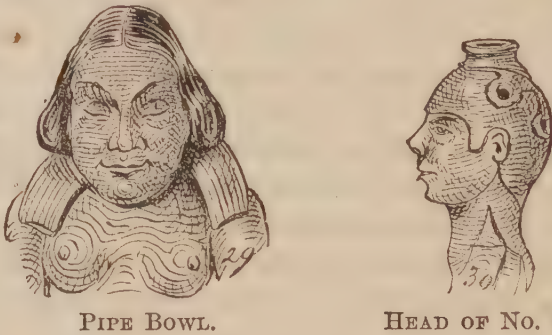
TABLE OF MEASUREMENTS.				
	Length.	Width.	Height.	
English.....	7.87	5.33	4.40	
Australian	7.50	5.40	3.75	
" No. 2.....	7.90	5.75	3.80	
English.....	7.75	5.25	4.75	
Neanderthal	8.	5.75	3.75	
Merom	7.25	5.50	4.	
".....	7.37	5.37	3.87	
Chicago	7.60	5.75	3.80	
Laporte	6.50	5.	3.80	

The average of 24 Mound Builders' crania (77) shows a capacity between that of the Peruvian and the red man.

The position of the foramen magnum is the same distance from the back as in the red man (0.372), and further back than that of the negro.

The tibia is found to be quite flat, approaching that of the ape, in about one in three of all the specimens in the States.

Some additional facts might possibly be obtained on an examination of the remnant of the



Mound Builders now living among the Natchez Indians—or rather their remnants, for that tribe was nearly destroyed by the French.

Average of measurements of 16 skulls of the Natchez:

	Around.	Length.	Width.	Height.
10 Males.....	20.50	6.57	5.80	5.60
6 Females..	20.10	6.30	5.75	5.10

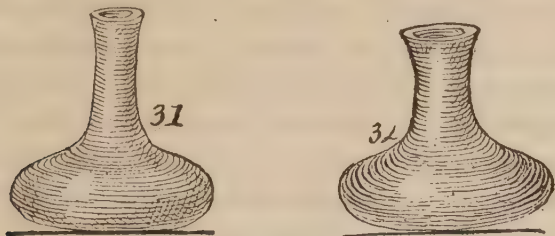
The tibia in about one half of these cases were flat.

Measurements of 5 crania of the Frog tribe:

	Around.	Length.	Width.	Height.
1.omitted.....	7.1	5.7	4.	
2. 19.8	7.2	5.8	3.5	
3. 20.1	7.4	5.6	4. (3.9)	
4.omitted.....	7.3	5.3	4.2	
5. "	7.2	5.9	3.9	

If the Mound Builders originated in the Atlantic or Mississippi basin, and were forced to migrate to Central America, they could carry with them their culture, of which there seems convincing proof in the remnants of their works, but they could not carry with them the necessary vitality required to endure the climate of that almost tropical region, and it is

therefore probably vain to look for any of their descendants in Yucatan, unmixed with the natives of that country. Any crossing of the races, if they were distinct, might have en-



BOTTLES FROM MISSOURI.

abled the emigrant race to hold out, in which case there will be found skulls in recent cemeteries answering to those of the Mound Builders.

Average of measurements of 38 skulls at or near Uxmal:

	Around Glabella and Occiput.	Length.	Width.	Height.
29 Males....	21.63	7.20	5.85	4.31
9 Females..	19.25	7.	5.	3.82

Average of 18 skulls from an ancient vault near Palenk:

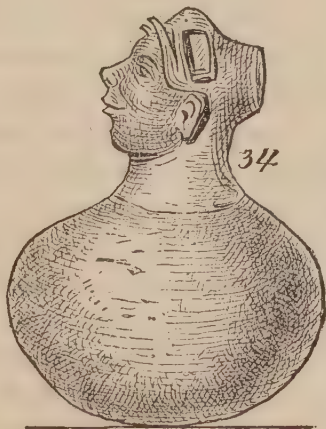
	Around.	Length.	Width.	Height.
15 Males....	22.8	7.85	5.38	4.41
3 Females..	19.5	6.80	5.	3.90

The tibia of but very few of these skeletons were seen; all of which were more or less flattened.

If the ancient Mexican race are represented in the modern so-called Indians of Mexico, their crania will also furnish similar tests.

Average of 13 skulls of Mexican Indians (Chapultepec):

	Around.	Length.	Width.	Height.
12 Males....	21.90	7.50	5.58	4.10
1 Female...	21.5	7.	5.	4.



33. BRONZE KNIFE.
34. STONE JUG.

In these instances from the supposed remnants of the Mound and Temple Builders there appear the peculiarities of projecting superciliary ridges, sloping forehead, and other points

which lead us to believe them to be from the true descendents of the ancient race.

There are remnants of many ancient races in the eastern world, some of which are well known, as the Welsh, Basque, Copt, Gipsy, Jew, and Chinese, and there are probably many others less distinct and unrecognized, appearing only as varieties in various nations.

It is probable that a careful study of the languages, anatomy, manners and customs, religion and traditions of the Indians in Central America and Peru, would throw a strong light on the ancient civilization of the Mound and Temple Builders. Some attempts in this direction will be reported later in this article. Among the aged nations in the East there are ideas, notions, customs, and laws which originated twenty to forty centuries ago, and which are reflected in the present condition of the same races, however depressed by servitude, dominated by superior force, shriveled through



BOWL FOUND IN MISSOURI.

lack of culture, and stifled by a denial of natural outlets for religious and social instincts. In the midst of these evidences of decay there are central truths which are keys to the interpretation of the ancient systems by which society was held together, and it appears probable that if the work so ably begun by the Abbe de Brasseur should be carried forward toward a complete collection of this precious material, and some peculiar genius like Champollion Figeac appear to interpret its meaning, we should have as clear a knowledge of men and things on this continent in pre-historic times as is possessed of any nation in the eastern world in the same age.

There were three varieties, if not three distinct species, of men in North America, who can be distinguished by the terms long-headed (*dolicocephalic*), wide-headed (*brachycephalic*), and intermediate (*orthocephalic*). Two of these were builders, and the other one, the broad-heads, were smashers, and races or individuals through all the world of a similar form of head follow a like inclination, both in intellectual and in

physical affairs. The third race were quiet, inoffensive people.

The perpetuity of race peculiarities is astonishing. After many centuries of dilution with



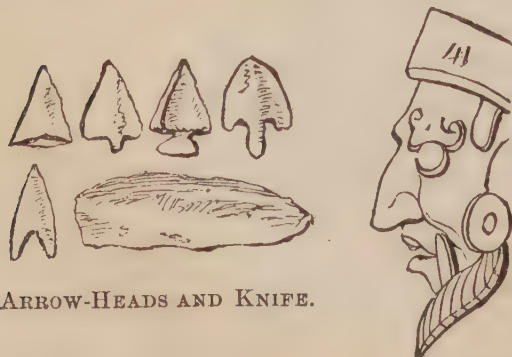
36, 37, STONE AXES; 38, BRONZE SPEAR-HEAD; 39, 40, STONE HAMMERS.

other races, association intellectually with superior men, the Celt of to-day is essentially the same as was the Celt of the remote stone age, the only difference being the result of culture, and, therefore, an improved use of such faculties as were created in his brain. Where he used a stone implement in the primitive age, or in succeeding epochs bronze or iron, he uses steel in the present, and his work improves in proportion to the perfection of his tools.

The permanency of faculty and motive is the best guide in the study of ethnology, and is the foundation for the perpetuity of language.

The great comparative anatomist, Cuvier, after a careful inspection of the skeleton of a man which had been found in an undisturbed stratum of lias near the Rhine, pronounced it a recently buried specimen in a modern churchyard. It was the first he had ever seen of that primitive age, and proves, not the scientist's error, but the perpetuity of nature's types, which, as in this case, suffer no change in ten to thirty thousand years.

The great points of distinction between man and the ape are, language or speech, walking, and the use of tools, with a constant improvement in their perfection and in his work. There has never been seen an ape who could



ARROW-HEADS AND KNIFE.

speak. He does not walk, but crawls on his four hands; and he uses few tools; nor does he show an inclination to improve in the selection

of his defensive appliances, in his habitation, or in his supply of food, or the preparation of it, for he can not make a fire.

The anatomical development of the brain of man and that of the ape in embryo proceeds inversely one to the other. In man the frontal lobe appears first, fills out first, the middle following later; in the ape the middle lobe appears and fills out first, and the frontal never fills out to a symmetrical outline, as in the human brain. As the shape and quality of the tool as well as its size determines its fitness for use, it is seen that for intellectual or spiritual results the Chimpanzee's brain is totally unfit.

In the most primitive forms of the skull of man, such as those called Borreby and Neanderthal, in Europe, and the Mound Builders, teocalli builders, and cave dwellers (?) of America, there is still a difference from the ape form, which can only be expressed as that of a perpendicular from a diagonal, or even a horizontal.

The "arrested development" theory is apparently defeated by this one fact of observa-



tion. The other theories by which the hypothesis of man's simian origin is supposed to be shown will vanish into their proper sphere of errors or myths as soon as the test of careful scientific observation is brought to bear upon the assumed facts by which they are supported.

The most enlightened science teaches us that species are immutable, and no one can be derived from another; they may vary, and in their variations suggest to the observer a likeness or resemblance in some respects to others; but when relieved from improper restraint, the general type is restored, and bears evidence of an independent creation.

Capability for improvement in the several races of men is estimated from the known preponderance of brain as compared with the lower parts of the head (not counting the body). The skull is shaped from within, and is the natural cover for the lobes of the brain, over which it is laid, as the shell is for the oyster.

Whether the brain originates thoughts or not, is a difficult problem to solve, but that it is the organ of mental activity there is no question. The shape of the tool indicates the kind of work for which it is fitted, and the proportion the lobes of the brain bear to each other is

indicative of personal character. Judged by these indications, the Mound Builders were a quiet, peace-loving race, who made their homes pleasant places by their art works, and honored their public servants while they lived with magnificent dress, habitations, and attendance, and with mound burial when dead.

That mound burial was a distinguishing honor is probable from the comparatively small number so honored, and from the evidences pointing toward vault interments, cremation and urn burial for the masses as the common custom.

The same test of proportion applied to the red men, who have the frontal lobe small, the central convolutions undeveloped, the cerebral vault pyramidal, and the middle lobe large and well developed, indicates a character of great selfishness and cruelty.

Our knowledge of them confirms the indications, for we know them to have a strong propensity and aptness to borrow vices, and an unconquerable aversion to the virtues of civilization. There is brain enough, and of good quality (the faculties of the red men when exerted in their favorite pursuits are scarcely equaled by the white man's), but the intellectual is overpowered by the animal, and when that combination occurs in individuals or nations of the white races, the result is lack of moral purpose and dominance of brutal instincts, generally unfitting them for good society, and hindering their progress.

The red men have left no monuments to commemorate their existence on this continent, where they were but tenants with the bears and buffaloes. Their only achievements in the fine arts being the pow-wow, not one word of which did they ever commit to writing. The use of the fine arts, that bank in which civilization makes all its deposits, and from which is drawn all the wealth and culture that distinguishes us from the savages, was unknown to the dweller in the wigwam. His chief title to a niche in history will be that he occupied a vast and beautiful country, from which he had driven out a civilized race, and made of it a wilderness, where there had been fields, gardens, cities, temples, palaces, whose ruins have been hidden for ages under successive forests of the most gigantic proportions.

This is a peculiar fact in ethnological history, and indicates a higher antiquity for the American races than any in the eastern hemisphere, for there the conquering races, however barbarous, added their blood and brain to the common stock, and formed a new basis for civ-

ilization; in some cases improving on the displaced conditions. In other cases the barbarian remained unabsorbed, as in the case of the Turks, dominating the superior races; but here are instances of the contrary, a faculty for mere destruction and displacement.

If the specimens in figure 8 were typical specimens, giving the exact average of the several races in the different ages, we could feel somewhat satisfied with the exhibit; but they are probably not such types.

The variation in the crania of any race or nation is so great that a large number is required for ascertaining an average, and the specimens from the primitive ages are still very few, and not all of these are complete, some having lost, through decay, important parts.

There are enough, however few, to furnish evidence toward refuting the hypothesis that the "world is growing weaker and wiser." The indications are directly the contrary, and the succeeding ages produce men of finer forms, of keener intellects, and of higher culture; and that not from the simple law of physical nature, but as a result of preserving good and useful ideas and things which instruct and benefit mankind. Without instruction, men would be ignorant and helpless indeed; but with the great amount of knowledge of every kind of good and valuable things that is passing before the eyes of children, and entering their ears, practically instructing them from the very cradle, it is one of the most astounding things that such an exception as an ignorant man can be found. Ignorance among the white races is only relative, and not of that profound and empty character which is found in the lower races. The common white laborer is generally stored with knowledge and experience in his own sphere, and outside of that he is no more ignorant than the average of business men outside of their own calling. The broad men are only those who make it a profession to gather knowledge from every class, and they are the real teachers and rulers of their fellow-men.

It is probably on account of this limitation of individual knowledge and experience that men in nearly every age and nation have venerated those whose attainments have appeared to be almost universal, as might be said of Solomon, Bacon, Socrates, Plato, and Shakspeare. Among the half-civilized nations this veneration has culminated in the worship of those men, who have been exalted among the gods.

The American races did not worship their ancestors, and, therefore, that is another pecu-

liarity marking their independent origin. They were distinct and peculiar in their locality, anatomical structure, language, habits, architecture, dress, science, religion, and traditions, and the little that is known of them is still sufficiently interesting to stimulate travelers and scholars to increased research.

Our own land is practically unknown to the

great tide of travelers who seek for new and strange things in foreign countries, leaving behind them richer fields for exploration.

Know thyself, and the proper study of mankind is man, are sayings that may very properly be supplemented by, Know your own country, the proper study of Americans is America.

Physiognomy, or Signs of Character.

Of the soul, the body form doth take,
For soul is form, and doth the body make.—Spenser.

CONVERSATIONS ABOUT HUMAN FACES—No. 3.

"IT storms so to-day," said my brother, "there won't any one come in, so let us have a talk about these faces. I've been arranging them with a view to certain effects, and if there is truth in the saying of Spenser that 'Soul is form, and doth the body make,' I think you can read without an interpreter what it seems to me these faces teach."

"Where in the world did you get so many faces?" said I, "and such a variety? Here are types of all grades of American people, from the Diggers to George Washington, and a very fair representation of foreign races, too."

"That question is easily answered," said my brother; "I have an arrangement with photographers in different parts of the country by which they send me proofs of the various pictures they take, and so, for a trifle, I throw a net into all waters, and gather fish of every kind, not one of which, be it bad or good, is cast away. Now let me introduce you to this select company. Here are divines; close by them are eminent judges; next, as you see, are statesmen; here is a group of artists; in this corner are the poets and literary men; near by are some crowned heads; this group of well-to-do-looking men are some of our merchant princes."

"And what horrid faces are these in this left-hand corner of the table?" I exclaimed, in disgust, as my eye ran over the series of souls that with imperturbable calmness met my gaze.

"Oh they belong to the race," said my brother; "those are noted murderers; this

is Ruloff, this Booth, and here are Chuck and Evans."

"In mercy to them and to me, hide them," I exclaimed. "How they would shrink from sight could they but see themselves as others see them in contrast with this group of jurists."

"You don't pretend to say that *all* these men are divines, statesmen, artists, literary men," said I. "This face here next to Dr. Newman's is that of a clodhopper, and this between Longfellow and Bryant is entirely destitute of intellectual expression; I doubt if he can even read. And here is Montalan, Jim Fisk's last love, between Mrs. Stowe and Mary Somerville."

"It is all done with a purpose," said my brother, "and I wish to see if you can tell what the purpose is."

"I think the most obvious interpretation is," said I, "that it is to show the difference between the great and the small, between those who habitually think of their own little interests, and those who are absorbed in something higher."

"You've hit it exactly," said my brother. "The whole race may be divided just at this point, self-seekers on the one side; seekers after truth, beauty, knowledge on the other. How large the first class, how small the second! Look at this picture of Agassiz, the man that, with the most splendid opportunities, 'hasn't (to use his own expression) time to make money;' and Tyndall, close by him, how much time do you suppose *he* spends before the looking-glass, or in counting over

his bank-notes, or nursing his reputation? Every one of these great faces shows that something besides self engages the thought. Dickens is occupied with Little Dorritt or Sam Weller or Sairy Gamp; Lord Palmerston is revolving some deep question of statecraft; Doré is absorbed in visions of purgatory or paradise; Eugene Sue is threading the intricacies of Jesuit cunning; John Stuart Mill is busy with his Principles of Political Economy; Albert Barnes is trying to arrive at St. Paul's meaning when he speaks of partaking of the sufferings of Christ; and how easy it would be to take up all these faces and indicate the line of thought running just back of them, yet clearly visible to the eye 'purged with euphrasy and rue.' Mazzini, can't you see United Italy in his seer-like face? Isn't free grace written in every line of John Wesley's physiognomy? In proportion as men live not in themselves and for themselves, but for truth, for universal man, do they approach the God-like, in outward seeming as in inward verity. This clodhopper, as you term him, between Longfellow and Bryant, is a worthy Minnesota lumberman, one of those to whom 'the ample page' has never been unrolled. Life to him means bread and butter, clothing and shelter for himself and his family. He believes, if he ever thinks anything about the stars at all, that they shine by the light of the sun; that Andrew Jackson is still President; that a horseshoe brings good luck to the finder, and that seeing the new moon over the right shoulder is a sure sign of coming good. Total freedom from prejudice," continued my brother, "is found only in minds of the noblest type; and in proportion as men rise in the scale of manhood, do they intuitively recognize the truth of the Scripture that all nations are of one blood, and that universal brotherhood is the ideal and the normal condition of the human race; and so they live not for themselves but for others."

"Did you have any design in arranging these divines and jurists side by side?" I inquired.

"Most certainly I did," said my brother; "can you tell what it was?"

"They look wonderfully alike," said I; "and yet I think the jurists are an abler looking body of men than the divines."

"Some of them are," said my brother; "when you find a man that devotes himself to the mastery of the elementary law, no less than to the practical; that digs till he finds the foundation stones on which the whole edifice of jurisprudence reposes, you have something more than an ordinary divine. What is that beautiful sentence of Hooker, said to be the finest in the English language?"

"Wait a minute," I replied; "here it is quoted in Mackintosh's Law of Nature and Nations: 'Of law, no less can be said than that her seat is the bosom of God, her voice the harmony of the world; all things in heaven and earth do her homage—the very least as feeling her care, the greatest as not exempted from her power; both angels and men, and creatures of what condition soever, though each in different sort and manner, yet all with uniform consent admiring her as the mother of their peace and joy.'"

"In certain departments the theologian and the jurist occupy common ground," said my brother. "Next to theology the study of jurisprudence is most important and most useful to man."

"Where do the doctors come in?" I asked.

"If all the laws of God were obeyed," my brother replied, "the occupation of the doctors would be gone. It is just as much a violation of law to eat improper food and to deprive oneself of sleep, as it is to be idle, or to overwork, to steal, or to kill. But look at the moral character of John Marshall, John Jay, and Sir Matthew Hale, as it shines from their faces, and compare it with that of Dr. Chalmers, Dr. McCosh, Bishop Simpson; is not the judicial ermine as spotless as the priestly surplice?"

"It's a great pity," I rejoined, "that comparisons lower down in the professions become so odious."

"You confound lawyers with pettifoggers," said my brother, "when the distance between them is as wide as between politicians and statesmen. But here are two or three groups I wish you to look at, as there is a practical lesson of the first importance to be drawn from what, if you have insight, you may discern. Here are the brothers Field, all able men; here is Brigham Young and his four brothers; this is John Bright and his broth-

er; and here are several members of the Beecher family; tell me what you see."

"I don't know as I can read backward," I replied, "but I can read forward. The mothers of these Beechers and of these Fields were every way the equals and companions of their husbands, and the traits transmitted by one parent were not weakened and nullified by those transmitted by the other."

"That is exactly the point," said my brother; "it's a great pity that able men in choosing their wives don't have more regard to the generation likely to come after. I don't know anything about the parents of Brigham Young, but I can make a shrewd guess that both of them possessed marked traits of character. This sleepy-looking brother on the left inherited the weaker qualities of both father and mother; the one on the right has a fine physique, but force is wanting in his composition; these other two live in the shadow of Brigham, who is the one sound apple on that family tree."

"Ah! so you call him sound, do you? Have you turned Mormon?"

"Oh, no; he's sound in his way, and certainly a very able man; he has remarkable balance of faculties, which he inherits alike from father and mother. John Bright is evidently the flower of the family; his brother resembles him, but somewhat lacks the quality that has placed John foremost among English statesmen. If we knew both his parents it would not be difficult to trace the traits derived from each that are so admirably blended in him. The parable of the sower applies as well to human beings as to individuals of the plant world; what a pity people in marrying do not take it more to heart!"

"I see you've placed Hawthorne among the artists; was that intentional?"

"It was, and George William Curtis belongs there too. Compare their faces with these of Doré, Birket Foster, Hiram Powers, and Thomas Crawford. You see they are all of one quality. Hawthorne's place among literary men is unique. Put him over here with Longfellow and Dickens and Irving and he looks lonesome."

"It is surprising," said I, "what revelations this arrangement of pictures will bring out. Comparing Doré's face with these oth-

er artist faces, I can see what heretofore I have sought in vain—his aim in art is not beauty so much as it is truth and fidelity to nature. Birket Foster has an eye chiefly for the picturesque, and one who has drunk to the full the beauty of his illustrations will recognize his pencil at a glance; John Fennel here, the artist in *Punch*, sees only the mirthful side of human nature and social incident; but to Doré, the ghastly scenes of the battlefield, the beatitudes of paradise, the woes of the lost, the tragedy and melodrama of human life, seem equally attractive. The faces of these crowned heads are by no means remarkable; there is more real genius in Doré's head than in all of them put together."

"Royalty is only a beautiful bauble," said my brother. "Isabella never really reigned over Spain any more than Victoria does over England, or William over Germany. The soul of Germany is Bismarck; Gladstone, Bright, Disraeli, have far more influence than Victoria, but the real rulers of England are the able editors, the creators and leaders of public opinion, whose names it is not easy to learn, and whose faces never appear about the throne."

"Yes, indeed," said Augustus, who had been standing in the doorway listening; "Carlyle was right in his utterance twenty-five years ago, 'The question is not to be who is king or kaiser, but who is able editor?' We create the very atmosphere that kings and queens and statesmen breathe. I'd rather sit at my desk and write editorials than represent the sovereign State of New York in the Senate at Washington," and he was gone, to write an editorial, probably, before we had a chance to speak to him.

"I think there's a great deal in hands," said I; "now, these pictures that show the hand as well as the face I can read far more readily than those in which the head only is given. If I were a photographer, I would always bring the hand in. In reading living men and women, I learn as much about them almost from their hands as I do from their faces. The two are, in fact, complementary to each other. For instance, take this picture here of this gentleman whom you very well know; the face is strictly intellectual, and one would take it to be that of a man of

medium size, and expect to find associated with it a hand long, slender, and nervous, rather than muscular. But, on the contrary, he is considerably over six feet, and his hands are large, blunt at the ends of the fingers, muscular and brawny, suited better to the plow-handles than to the pen; yet with that intellectual face the plow-handles don't harmonize at all."

"He should be then an agricultural writer," said my brother.

"As he is," I replied.

"I am inclined to believe," said my brother, "that if we could interpret correctly all the lines and angles, the lights and shades of the human face and figure, as perfectly as Cuvier could from a tooth or a scale charac-

terize and portray the physiognomy of quadruped or fish, the head, the hand, and the foot of a human being would be to us a key to unlock the character in all its secret springs. One of our greatest American portrait painters recognized this as a truth, and was as careful to give the exact delineation and expression of the hands and feet of his 'sitters' as of their faces.

"When we have settled satisfactorily the whole subject of palæontology, and know of a certainty the habits and history of all fossil and all living species of animals, our scientific men will have more time to study the human face and form divine, and learn the alphabet of character as written there."

LAURA E. LYMAN.

UNWRITTEN POETRY.

POETRY is the language of the soul, the out-gushing of its emotions and desires. It is the effort of the immortal part of our being, that divine essence which the Creator breathed into man after He had formed a body for its earthly abode, to reveal itself to its kindred spirits in the flesh. This is true of written poetry, or those feelings flowing from the secret depths of the heart which find, through the medium of some language, an outward expression. There is, however, poetry that is never written. Many a genuine poet lives and dies unknown to the art of song. Many feel the soul-stirring inspiration of the muse who never attempt to speak their feelings in the language of men. They remain mute while the spirit of poetry is playing the divinest music in their hearts. They feel incapable of imparting the strain to others without marring its heavenly symphony, and they yield themselves silently to its captivating power; thus they pass through life, their hearts often quivering with inaudible melodies, yet die "unhonored and unsung."

And those whose poetic genius breaks the bonds of solitude, and "touches the harp" with such magic power that "nations hear entranced," fail to express the sweetest strains that vibrate in the mystic chords of the heart. It has been truly said that the author is greater than his works. They are but faint representations of the glorious images of the beautiful and excellent that pass in ethereal procession be-

fore his poetic vision. Though the world receive his productions with applause, and Fame crown his brow with her fadeless laurels, he feels how incomparably inferior are his best efforts to the grand ideal which his enraptured soul beheld, but which refused to be embodied in the coarse language of mortals. He alone can contrast his faulty endeavors, which others may esteem good, with the unwritten thoughts and feelings whose subtilty eluded the grasp of expression. He feels the inspiration of poetry expanding his soul, and, in the consciousness of this mysterious power, he attempts to translate into the numbers of song the sweet whisperings of the muse; but ere he has sung more than an enchanting prelude to the strain that is swelling his heart and quickening its faculties of expression, the music dies away like the tones of the Eolian harp, leaving the song unsung and the singer shorn of his power.

The unwritten poetry, like the hidden pearl in the ocean, glows far down in the depths of the heart, unknown and unfelt beyond its own solitary dwelling. Life, with its "deep fears and high hopes," its "glorious dreams and mysterious tears," is a grand unwritten poem, to which all the productions drawn from this theme, though immortalizing many a name, form but a vague preface. This deep undercurrent of thought and feeling that flows from the hidden fountains of the soul, this unseen life that underlies the surface of our mortal

existence, never can be revealed until it has a medium of expression as ethereal as its own nature, until heart speaks to heart through the electrical flash of spirit intuition.

Withhold not the meed of praise from industrious genius; still twine the wreath of fame for the gifted bard who sings an inspired

note from the mysterious song of life; but honor obscure humanity with the reflection,

"If singing breath or echoing chord
To every hidden pang were given,
What endless melodies were poured,
As sad as earth, as sweet as heaven!"

H. CLAY NEVILLE.

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—William Penn.

AN ELECTIVE JUDICIARY?

THE question has lately been determined at the polls by the people of New York whether judges of all the Superior Courts of the State shall continue to be elected by the people or appointed by the Governor, by and with the advice and consent of the Senate.

Believing this question to be one of the most vitally important for the continuance and perpetuity of a true Republican form of Government, in addition to the many able arguments offered by the advocates of the appointive system, the following views are suggested for the consideration of all who are interested in securing an honest, upright and independent judiciary.

There is no doubt that in a republic such as ours, the people ought to be possessed of as much power as is possible, for the strength and maintenance of the institutions peculiar to our form of government. The elective franchise is properly conferred upon the people to the end that by their suffrages officers may be elected from among their number best fitted to discharge the duties imposed upon them for the best interests of the community by whom they are chosen. Such officers are necessarily political, and when presented to their constituency become the subjects of criticism by their fellow-citizens as to character and fitness.

The various parties into which the people of a republic are divided upon all questions of government, either local, State, or general, necessarily causes them to present candidates representing views and opinions in consonance with the party to which they may be said to belong. Such candidates must neces-

sarily entertain and advocate the views and opinions of the party nominating them, upon an implied pledge that if elected they will discharge their official duties in the interest of that party. It can not be denied that officers thus elected have a bias in favor of the party which has brought about their election, and so can not act impartially when there is any issue in which their "constituency" is interested. The history of this Republic ever since its organization has shown how men belonging to one or other of the great parties that have controlled its governmental affairs have, by voice and vote, obeyed the behest of party dictation. This may be proper, perhaps, in regard to purely political questions in which there may be honest differences of opinion as to the manner of conducting the administration of affairs.

With judicial officers it is entirely a different matter. They should not, and ought not, to become subjects of partisan contest. As judges of courts of limited or enlarged jurisdiction, they should be selected entirely with reference to their purity of character and their eminent professional fitness to decide all questions presented for adjudication honestly and conscientiously, and in accordance with well-settled principles of civil, common, and statute law. Judges should be *sans peur, sans reproche*, and fully competent to administer equal and exact justice to all who may come before them seeking redress as suitors, punishing the guilty, and protecting the innocent. Political partisanship should have no connection with the selection of the judiciary. The

heated contests for party supremacy, whatever may be the result in regard to candidates other than judges, can not but be prejudicial to judges when elected, for in their nomination and election they are presumed to be the representatives of the principles and platform of the party which elected them.

How this is exemplified has been seen in other places besides the city of New York. In one particular instance in the western part of New York a partisan judge was elected before whom an important cause was tried, in which a decision was rendered manifestly biased and political in every respect. The cause was appealed to the highest court of the State. There sat the same judge, and because of his influence the cause was three times argued before a final decision was rendered which reversed the judgment of the partisan judge. The numerous reports of decisions of the courts of this and other States where the principle of the elective judiciary prevails, signalize many cases wherein prejudice arising from partisan bias has warped the judgment of courts controlled by political influence.

In some of the Southern States, where the election of judges was in the hands of the people who had engaged in the late civil war against the United States government, men were elected with the express understanding that in the courts over which they would be called to preside no suitor of Union proclivities would be entitled to any respect or consideration. So much so was this the case that the power of the United States had to be invoked for the protection of suitors of this class.

In an election for judges of the appellate tribunal in Illinois recently, one of the best judges of that Court, on account of a decision rendered by him involving a question regarding a matter of interest between the farmers of that State and the claims of railroad corporations, was defeated by a candidate inferior in every respect, thus materially injuring the reputation of a bench hitherto worthy the esteem and confidence of the people of that State. It was not questioned that the decision was in accordance with law and precedent, but it did not suit the views of a certain class of the people

who had it in their power to make and unmake their judges.

There has been an exhaustive discussion of this question, called forth by the submission of the proposed constitutional amendment to the people of this State, whether in the future judges should be elected or appointed. Both experiments have been tried here and in other States of the Union, and experience has shown that by far the best mode of selecting judges is that of appointment by the Governor of a State by and with the advice and consent of the Senate. While a Governor may have been elected by one of the parties of which he might be a representative, it does not follow that in the selection of judges of courts he would do so upon any other principle than their character, qualification, and fitness for the place. The nomination being made and submitted to the Senate, that body would further examine into these matters, and if aught were found that militated against the nominee, the power would be with them to reject, and thus prevent improper men from holding such a position. Never during the time when judges in this State were appointed to office was it known that there sat upon the bench of any of our courts men who were unfit for the position, or who committed acts which became the subject of trial and impeachment, as has been the case under the elective system.

The course pursued in England is ample proof to establish the soundness of the principle of the appointment of judges. The judgments and decisions of the courts of that country upon all questions wherein the rights of persons and property are involved, are held to be authority binding and decisive upon the judicial tribunals of similar jurisdiction in other countries, while those of courts in many of our States where the elective judiciary system prevails, are doubted and overruled.

The judiciary of a country is the bulwark of its institutions and the maintenance of its power and greatness, against which, if honest, upright, and fearless, the waves of passion and party may beat in vain. To maintain this spirit of independence there must be an avoidance of the political hustings, where the ermine is so likely to be bedraggled in

the mud and slime of contending factions, and controlled by the vilest and most vicious classes of society.

That we have had a national judiciary justly distinguished at home and abroad for the excellence of those who have been and are now presiding upon the Supreme, Circuit, and District benches, is mainly due to the fact that they have been appointed for their personal purity, noble manhood, professional experience, and high legal attainments. As a consequence, the people of the Union have always respected and obeyed the mandates of their Federal Courts, however distasteful at times some of the decisions may have seemed to be. The honesty and integrity of the presiding judges have never been questioned, and the people of the Republic still believe in the enforcement of law as pronounced by the highest authority in the land. Has this been the result in the States

of the Union where the elective judiciary system prevails? Let New York, Pennsylvania, Indiana, Illinois, and Mississippi answer.

How has New York, especially, suffered in her reputation and commerce through the elective judiciary! It is to be hoped that the experience of the past twenty years will have brought the people of the Empire State to see that a return to an appointive judiciary is the best for their political and material prosperity and perpetuity. Where New York leads the others will soon follow.

When this consummation, so devoutly to be wished by all good citizens, is accomplished, then will the States be strong in the administration of justice and in the protection of the people against wrong and oppression. An independent judiciary is of greater value than the accumulation of untold wealth, or the achievement of victories upon the field of battle.

HON. ALFRED DOCKERY,

MEMBER OF CONGRESS FROM NORTH CAROLINA.

ALFRED DOCKERY was born December 11th, 1797, in Richmond County, North Carolina, and is consequently seventy-six years of age. His father was Thomas Dockery, an honest and industrious farmer, who married Nancy Covington in 1796. In this union seven sons and three daughters were born, all attaining maturity. They lived in comfort and abundance, in a section of country settled by Quakers and Presbyterians, all being noted for their simplicity and integrity. In those days bolts and bars and locks were unknown, for there was no such thing in that region as pilfering and stealing. The first court was held in a log hut, in what is now the flourishing town of Rockingham, in which the seats were huge pumpkins—a novel idea, but speaks well for the size of the pumpkins. The farmers raised Indian corn, oats, rye, and wheat. These primitive people were strong, healthy, long-lived, jovial. The women spun, wove, knit; were content with the homespun garments they made themselves, averaging about one calico dress in a lifetime. They busied themselves in raising vegetables, making butter and

cheese, raising poultry, and gloried in the art of preparing a good dinner. Such were the people, such the circumstances surrounding the advent of Alfred Dockery. His father was of Scotch-Irish parentage; his mother, Nannie Covington, English—people of powerful frames and indomitable wills. Young Alfred early learned the invigorating work of a farm; splitting rails and plowing long furrows were among his daily occupations in winter and spring, while he liked nothing better than to hunt coons or take a hand in seine-fishing at night, by way of relaxation and amusement. In those days "Bee Dee River" was stocked with fish—cats, red horses, trout, and, in the spring, with shad. Those "fishing tours" were some of the chief joys of his boyhood, as "quiltings" were his sisters' pride, and "hustings," or, as they are called in the South, "corn-shuckings," the boast of his hard-working, money-making father. Young Alfred went to school very little, unfortunately, for, with his native powers, what might he not have been with early culture? He was the eldest, though, and schools were

scarce, and hardly appreciated as they are now; so he did not enjoy the advantages afforded his brothers Henry and James, the former of whom attended medical lectures and became an eminent physician, and one of the pioneer settlers of Hernando, Mississippi, and James a professor of *belles lettres* and French in a college.

Our hero turned his attention to the double occupation of farming and merchandising. His father gave him land, and at the "Black

with difficulties rather than evade them. With a strong, social bent, his easy, good-natured manners won all who approached him, and made him beloved of little children. When not more than nineteen he married Miss Sallie L. Turner, of Stanley County, whose name is well known in her section for charity, industry, and hospitality. She became the mother of eight sons and four daughters, two of the twelve dying in infancy. Alfred Dockery entered upon public



Jack," destined to be later a noted voting precinct, he opened a store, where he dispensed goods and groceries with a certain *bonhomie* that attracted large custom.

He was a fine-looking young man, of a powerful organization, a temperament remarkable for strength and force. With strong moral sentiments, and a deep sense of justice, his emphatic statements carried conviction with them. His large Firmness disposed him to hold his ground tenaciously, and his Combativeness to make him grapple

life in 1820, when he acted as census-taker. Uneducated though he was, he possessed oratorical power of a high order, powerful lungs, and a voice of deep sonorousness.

By his attention to business and his habits of sobriety, he won public confidence, and was sent to the State Legislature, first to the "Commons" in 1822, and afterward to the Senate for a succession of years, beating everybody that ran against him for a period of twenty-five years. Wm. W. Holden, sometime Provisional-Governor of North Carolina,

said of him that "not Webster himself would have been more irresistible in debate than Gen. Dockery, had the latter enjoyed early educational advantages."

"General" Dockery, as he is commonly termed, is one of the few surviving members of the Convention of 1835, which remodeled the State Constitution in many important particulars. Meantime, while serving the public he was mindful of home and business, and devoted himself assiduously to both at every opportunity. His farm prospered, and "Dockery's Level" became famous through the country for its productiveness. He was a devout Baptist, and, with his good wife, were the chief stay and pillars of the old Baptist Cartilage creek, or, as it was better known, "Dockery's Church." Old "Father Munroe," the pastor, was an institution in the General's family, a beloved and honored guest, whose stay with them during the monthly meeting and semi-annual "protracteds" was expected and rejoiced in like an intermediate little "Christmas time."

In 1845 Gen. Dockery ran for Congress against the regular nominee of his own party, Jonathan Worth, and defeated him, after an exciting canvass in a district composed of ten counties, by some 975 majority.

During his term in Congress he was an ardent Whig, not only devoted to his immediate duties, but by his attentions to his constituency, particularly in the circulation of valuable documents, making himself exceedingly popular. He was a persistent advocate of internal improvement during his entire career; and throughout the most hotly-contested political campaigns his opponents conceded to him "an inherent love of honesty and fair-dealing," and dubbed him the "Old Roman," as proverbial for his truth, candor, and integrity.

In 1851 he ran the celebrated race against Greene W. Caldwell, of Charlotte, N. C., being elected by a majority of 1,200. He was an earnest advocate of the Compromise Measures of 1850, as originated and sustained by his model and hero, Henry Clay, in honor of whom he named his youngest son—said compromise measures, as is well known, having in view the pacification of the country, endangered through the Mexican war, and the resultant acquisition of territory. In

April, 1854, General Dockery received the nomination for Governor by his party in convention assembled in the city of Raleigh. He entered vigorously upon the canvass, reducing the hitherto heavy Democratic majority from 7,000 to 2,000. The physical vigor which enabled him to canvass ninety odd counties, speaking in the morning, riding forty, fifty, or sixty miles in a day, and speaking again at night, losing sleep, scarcely resting at all, was something extraordinary. He seemed, indeed, incapable of fatigue. It was the only time in his life he ever sought office ineffectually; but failure in this case was almost a triumph.

About this time the General's life had reached the flood-tide of prosperity. He had succeeded financially; owned a first-rate plantation in North Carolina, and choice Mississippi lands yielded him a golden revenue. He had three grown daughters, the pride of their father's heart. The handsome brick mansion he had built was rarely without guests, and frequently echoed to the music and merriment of the elegant entertainments his family understood so well how to conduct. Their hospitality was something proverbial, something which, once experienced, one did not easily forget. Then his "son Oliver" had entered the political arena with much honor, and seemed predestined for the mantle his father had worn so well. This son, by the way, has abundantly fulfilled his early promise, and his speeches in the Fortieth Congress on "National Education" and the "Removal of Disabilities from the South," and other topics, evince much thought and culture.

In 1860 Gen. Dockery was again a member of the State Senate for the last time, in which he took a conspicuous and determined part in opposition to secession, risking in the earnestness of his convictions not only the chances for future preferment, but the kind feelings of his life-long friends. Sorrows had begun to crowd upon him; two of his gentle daughters had died, one of them a young mother; and when overwhelmed by numbers in the Senate, he returned home in the spring of 1861, it was with a gloomy presage of the evils in store for his country. He deprecated the war above all things, and foretold the end from the beginning. However, Gen.

Dockery was too full of State love and pride to see North Carolina preparing for the chance of battle and not aid her all in his power. 'Twas as if he had seen a child of his rushing into a burning building—*madness*, no doubt, he thought, but still he must do all he could to succor the child of his heart, the State; so he gave money to equip soldiers, gave bread to feed their families, and sent all his sons, except the boy Henry, to the front. The four years' conflict was a long agony to the deeply-tried statesman; the suspicion and unconcealed ill-will of those who had been friends being bitterness in his cup. But the end came, the very end he had predicted: loss of life, loss of property—ruin! And the General's head was grayer and his deep voice sadder after the direful news came that the fight was up, the South whipped, and his third son, John, his handsome, idolized boy, *dead in prison*.

Gen. Dockery was among the first to make a move to restore North Carolina to the Union. He has been ever since a strong advocate of Republicanism, being rather in advance of than with the sentiments of his class. He was also in favor of giving the colored people the rights of citizens. He has, however, devoted his attention chiefly since the war to repairing his fortune, taking vigorous charge of a planting interest in two counties, and successfully running a saw and grist mill. He is regarded by the freedmen as a tower of strength in their behalf. The General met with a serious accident last spring. While engaged in superintending

the construction of a water-gate, the bank of the creek on which he was standing gave way, and he fell a distance of fourteen feet his full length in the creek; he was rescued by a faithful colored man, not, however, without severe bruises and a terrible gash in his head. He did not lie up for this—Hercules that he was—longer than a fortnight! It seemed, however, to give a shock to his system, and his health began to decline. He went to New York in September last for medical aid, but returned in a more critical condition than ever. At last accounts he was very low.

P. S. DEC. 9TH, 1873.—Since writing the above a telegram has been received announcing the *death* of Gen. Dockery on the 2d of December. The sad intelligence has produced a feeling of profound regret in the hearts of all who knew him; his political opposers, those who strove to heap obloquy upon him during the "late unpleasantness," and all now join in acknowledging that a great man has fallen! His neighborhood, his country, his *State* has met, indeed, with a great loss. Who could forget his goodness to the poor, his compassion for the afflicted, his ever open-handed hospitality, and not pay the tribute of a tear as the clods fall on his coffin lid!

Like some monarch oak of the forest uprooted by the passing tornado, his fall creates a gap, keenly felt in the absence of the shelter it once freely gave, and the protection of its huge strength.

V. DU RANT COVINGTON.

MONEY—ITS FUNCTIONS AND REQUIREMENTS.—No. 5.

A COMMON-SENSE VIEW OF FINANCE.

A PROMINENT merchant remarked a few days since that the most concise and comprehensive statement of financial economy that he knew was that of Mr. Wilkins Micawber, to wit:

1st. Given a revenue of £19 19s. 6d.; expenditures, £20; result: *misery*.

2d. Given a revenue of £20; expenditures, £19 19s. 6d.; result: *happiness*.

Apply this principle to the earnings of our productive industries, and the rates paid by them for the use of money.

Authoritative statistics demonstrate that the average annual increase of our productions is $3\frac{1}{2}$ per cent.

The Controller of the currency in his report, December, 1872, shows the average net earnings of capital (including surplus) by the national banks for the year ending August 31st, 1872, to be 10 36-100 per cent. Add to this rents, salaries, the 1 per cent. interest (called tax) paid to Government, etc., and the figure will be fully 15 per cent.

This is the *bank rate* of earnings. When we

remember that *street rates* are largely in excess of those, and that brokers' commissions, legal costs for searches of real estate—exaggerated to avoid usury laws—etc., should be added, can we doubt that the average rates paid will fall short of 20 per cent?

Indeed, the BANK returns in some sections show largely in excess. We quote NET earnings for year ending Aug. 31, 1872:

Milwaukee.....	17.93	Nebraska.....	14.02
Iowa.....	17.70	Oregon.....	36.10
Minnesota.....	14.36	Utah.....	49.36
Missouri.....	18.14	Idaho.....	38.87
Kansas.....	15.89	Montana.....	24.30

To which should be added, as above, cost of rent, salaries, and the 1 per cent. interest (called tax) paid to the Government for original loan.

With 3 per cent. earnings and 20 per cent. cost, it follows that somebody sinks 17 per cent. per year, which, in much less than 6 years, compounded, would absorb the principal. This would cause a collapse then, but as all property is not hypothecated, liquidations or panics have been spread 10 years apart—say '37, '47, '57, and would have been in '67 but our volume of currency bridged it over.

The productive interests, universally acknowledged even by the old political economists as the foundation of all wealth, being thus undermined, eaten out, honeycombed, become so weak that at a touch they give way, and the superstructure tumbles.

As the foundation has never been so prominently in sight as the superstructure, the general observer remarks that such and such a building has tumbled, as palatial houses of finance and commerce go down; but a little removal of the rubbish will show that the trouble was begun in the cellar walls.

Here and now let us remark that the *creditor* as well as the debtor interest should unite in staying the devastation of this condition of things, as the former, not seeing that his revenues are principally derived from the capital, and not the revenue of his debtor, indulges in extravagant expenditure and injudicious investment, and when the hour of liquidation comes, he falls, and—

“—Like the baseless fabric of a vision,
Leaves not a wreck behind.”

The elements of his 20 per cent. revenue in commercial language can be analyzed thus: Net earnings of production, as above, 3 per cent; Insurance (otherwise called guarantee or risk), 17 per cent.

As he had no policy of insurance for the

same, and had not appropriated a sufficient reserve fund for the contingency, but had expended for personal affairs most of what may be called the premium, he falls—equally a victim with his debtor to our fallacious money system.

Such had been long our convictions, substantiated by many years' residence and experience in our metropolis, observation of our local and neighboring productive interests, and of commercial and financial matters in the great city; but desirous of more comprehensive information, we spent some weeks of the last summer in the interior of Illinois; not traveling by railroads and living at hotels, but in the saddle, carriage, and on foot, mixing with the farmers, staying with them at their homes, and taking part in their field and road work, and, therefore, get our figures from our own investigation.

The staple of that section is corn; 40 bushels to the acre is outside the average crop, and 25 cents per bushel outside the average price.

Let us see how this pays the farmer:

40 bushels corn, at 25 cents, is.....	\$10.00
Shucks and stalks.....	2.50
Total proceeds	\$12.50

COST.

5 days man, horses, and implements...	\$10.00
Interest on land, \$50, at 10 per cent...	5.00
Taxes, seed, shelling, insurance, etc..	2.50
Total cost	\$17.50
Loss to the producer.....	\$5.00

or 12½ cents per bushel.

This result may be stated thus:

1st. If the farmer owes nothing, he gets \$2 per day for his capital and labor; can work his land 200 days in the year, giving annual earning at \$400; that is, otherwise stated, \$10 per acre on 40 acres, which is full work for man and team. Out of that he must pay taxes and shelling.

2d. Add to the price, 12½ cents per bushel, and he has enough to pay as above, and 10 per cent. to himself or somebody else for use of money.

The farmers feel *very sore indeed* at this condition of things; they are working for less compensation than the former slaves; the labor is harder on their wives than on themselves, as the cells in lunatic asylums and early graves testify; they see no chance for education for their children, and on looking around for the cause, the first thing that meets their view is the railroad, with its extreme charges of one to four bushels of corn for taking one to mar-

ket; its watered stock; its highly-paid officials, its heavy dividends, its numerous sub-corporations, like the pilot, blue, green, anchor line, etc., "all little credit mobilizers,"—every one of which they look upon as parasites, eating the life from themselves and families. They are correct as far as they go, and they go a great way.

But we don't believe that the virtues are all with one class and the vices with another.

We argued on a preceding page that the devilish tendencies of our money system bore upon the individual creditor as harshly as upon the debtor, in ultimate result, but with this difference: with the latter the ruin was instantaneous, like death by lightning; but with the former a daily, an hourly torment.

Let us see how our proposed money system would affect the railroads:

As the bank rate of interest is so large, and their monopoly of cheap money from the Government is so valuable, resulting in such desirable official positions for officers and dividends for stockholders, it is but natural that the railroads, and every other money interest, should measure themselves by the same, especially as the Government pays 5 and 6 per cent. interest and exemption from taxation on its bonds, equaling about 10 per cent.

If the Government rate was 3.65 per cent., it would not be long before money would be accessible on bond and mortgage at 5 per cent.

Then, instead of our railroad agents moving heaven and earth to sell good first mortgage bonds bearing 6 per cent. gold interest at 90, they could readily locate 5 per cent. currency bonds at 100. New and needed railroads would be built with double freight and passenger tracks where necessary.

Every present existing railroad east of Buffalo and the Alleghanies could have its double freight tracks, along which processions of freight trains would move at a regular speed of 8 to 10 miles an hour, in lieu of the present dangerous and costly mode of dashing over a single track at the rate of 40 miles an hour to gain a siding for a passenger train to pass, where, perhaps, it may wait hours.

Those who are unfamiliar with railroad matters can hardly appreciate the dreadful wear and tear of such spasmodic running of freight trains and consequent cost; neither are they prepared to appreciate the immense economies to be effected by substituting moderate speed and continuous running.

This competition and economy would probably reduce rates one-half to one-third; in

other words, reduce the cost from 40 to 20 cents, or 14 per cent. per bushel.

These economies in the instance of the farmer, quoted above, say of 5 per cent. on interest, equaling \$2.50 per acre, and 20 cents per bushel on 40 bushels, say \$8; total, \$10.50 per acre, would overcome the present loss of \$5 per acre, and substitute a gain of \$5.50, making a result of \$3.10 per day for himself and a pair of horses 200 days in the year, or an aggregate of \$620. Is that an extravagant compensation?

Let us see how this would affect our national status. No doubt four times the cereals would be forwarded. This amount would cause a depression of price, followed by immensely increased shipments abroad. Instead of Great Britain, as in 1872, taking from Russia 140,000,000 bushels, and from us 40,000,000 bushels, the figures would at least be reversed.

Our exports of cereals would be more than quadrupled, as all the excess over about the present sea-board consumption would be shipped. Balance of trade would be overwhelmingly in our favor, and we should repeat, but in a much larger degree, the experience of England under very nearly parallel circumstances, quoted a few pages back, of receiving, first, our own bonds as remittance to be paid by Government, or held by our own citizens, and next, a continuous stream of specie, which, without legislation, would rate at par or less for currency.

Then we should take the position which "the laws of nature and of nature's God seem to have assigned to us," *the first* power in finance as in production.

Then will the planet's exchanges center here, and for the first time in our history will our independence exist in fact, and we shall be no more tributary to England.

"Seek first," says the good book, "the kingdom of God and its righteousness, and all other things shall be added unto you." The same idea was more profanely expressed by David Crockett, "Be only sure you are right, then go ahead."

It does seem as if this perfecting of our finance system was to be the keystone of the arch of our Republic.

With all the wisdom and conscientious care of the fathers of our Republic; with *especial* care to not only avoid evil, but the appearance of evil, they legislated against even the forms and titles of nobility but left two OLIGARCHIES in our midst. One, the slave oligarchy, said to the nation, "My life or yours," and died. The other has reared its head almost as high;

it will be laid as low as its brother. Shall we note the signs of the times and peacefully and scientifically regulate these vital currents of the nation, or shall we continue to drift downward in our national career, until the people, having exhausted all expedients to rouse their agents to their duty, appeal to their reserved right of revolution—perhaps it is for our present Congress to say?

But how about the ships to transport this increased product across the ocean? is the next

query. Our production even now has increased so much faster than transportation that ocean freights have advanced from 6 pence to 15 pence per bushel—equal to $2\frac{1}{2}$ former steamship prices; and herein is an extension of the same element of cost to the consumer and loss to the producer that we noted in reviewing railroad freights, and from the same cause, to wit, supply inferior to demand. The same disease, and requiring the same remedy, but presenting a different class of phenomena. But of this in our next.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall!
Thou art the nurse of virtue.

DOMESTIC HELP.

BY LAURA C. HOLLOWAY.

IT is going too far to apply the term “help” to all who hire out for domestic service. No greater misnomer could be given to some of the applicants. Bridget, in the parlor as in the pantry, is the same anti-progressive creature. The hard-cash side of the question is apt to be the only one that meets her comprehension, and it certainly is the main thing brought into consideration when a bargain is to be made. Take any of the side benches at the intelligence office, and go from one end of it to the other with the question “Are you a good cook or waitress?” and how many will say no?

The almost invariable answer will be in the affirmative, and if you do not know the natural disposition of this class of women, you will be very likely to accept their judgment and find yourself mistaken. It is not that any one of them, possibly, will deceive you willfully, but it is that they are all of such sanguine temperaments, that to them mountains are as mole-hills.

It is only after your disappointment is at its height that you fully realize how little judgment you have used and how much confidence you have placed in strangers.

An intelligence office is a nerve-racking place; not so much because of what it is as for what it is not. You go there for information and for help; you come away

disgusted that our American civilization has evolved nothing better than the present system of hiring help.

Entering the small establishment—for, like their resources, they are nearly all small—you ask a civil question of the chief. A fee of two dollars is the first business transacted. Then you get a girl, your intelligence man telling you that if she does not suit he will furnish another, and another, until you are satisfied. But the promise isn't half so tangible as the hard cash you have given up, and the result is, that, in the end, you have to complain about the worthless “help” he has sent. Likely enough he never sends any one again, thinking, evidently, that the first girl was worth the money, and his part of the bargain is ended when you retire with your prospective domestic. Domestic, indeed! you may indignantly reply, as, on closer examination, you find how little you have got in return for your trouble and your money. Fourteen dollars a month, board, and, perhaps, ignorance; and the two first items of expense are not to be compared to the last. This means the preparation of unsavory dishes; the breakage of your best china; your nicest ornaments. It means family discomfort, household cares two-fold increased, and loss of temper in proportion.

To many scores of ignorant girls you find one jewel; so if your luck is exceptionally bad, you have the consolation of knowing that you have plenty of company; and if there is a panacea for little woes it is in knowing that they are shared by others. But even the worst of woes can be endured, in this respect, if there are no little children to suffer for Bridget's errors. It is aggravating to have one's silver ice-pitcher scoured with the kitchen scrub-brush; but a replating can remedy that evil. It is hatefully provoking to have your clean walls marked up with matches; but a sharp eye can detect these failings, and a kindly firmness can eventually change, in part, such reprehensible acts. It is possible to endure short shortcomings when only a native carelessness, and not a selfish motive, begets them. But it is not possible that even the average mother can put up with ill-treatment to her child, unless she inflicts it herself. You will say that no good mother ill-treats her children herself; neither does she put it in the power of a servant to harm them. But these allegations would not, in every instance, be just.

For example, neighbor B. has a large family of children, a large house, and no very enlarged ideas of life. Some of her views are dreadfully narrow and circumscribed; and some are—well, it had better be left for you to say what they are after you know her.

She has handsome furniture in her home; quantities of silverware to adorn the buffet, and an excess of china and glass. She likewise has an excess of children. They range from one year to eighteen, and are as numerous as steps on a stairway. Motherhood is a burden to her; and she has no time to enjoy her social privileges, she is always striving so hard to meet her responsibilities. She will not hire a girl, she says, because her children are self-willed, and no servant could get along with them. So she cooks for her husband and family and hires out her washing, and has her elder children help her; and then, with it all, there is never anything clean or neat or sweet in the house. The mother is careworn, the father looks so, and the children are unhappy, discordant, and always untidy.

Though the family have means, they en-

joy nothing; and though they have a good house, they have no comfort in it. As to company, that is impossible; nor have any of them the least desire to go into society. The very condition of things at home unnerves them, and they are irritable and snappish, without knowing the reason why. Their relief would come in hiring two healthy girls; and a good assistant twice a week to help with the washing and ironing. The expense and worry of hiring the "help" would not compare with the present "out-at-ends" state of affairs there, and the balance would be on the improvement side. In this instance you see the mother does inflict ill-treatment upon her children by not hiring help; and even the most undesirable servant could relieve her of some of her burdens.

In the case of neighbor C. the matter is different. She does her best to get good girls. She pays liberal wages, and is a lady in all things. Her children are orderly, and her baby deserves all the idolatry father and mother bestows upon it. For her children's welfare neighbor C. is ready to make endless sacrifices; and, being large-hearted and sensible, as well as sensitive, she uses her best endeavors to choose wisely in the hiring of girls. She goes from the house of one employer after another to know of the past characters of those she thinks of taking. Her selections are made, after careful deliberations, but she can not get better material than the market affords. She has to hire one of the class and take the consequences. She can not help such occurrences as the following:

The day was very beautiful, and the baby restless in the house. Bridget* was given ample time to dress for the walk; and, when all was ready, a few direct warnings were given her to avoid all danger.

Far down the street the mother watched the little carriage containing her darling, and then, with a sigh, returned to direct the movements of the other children.

Two hours later, going into the park with a friend, she saw the girl seated under the shade of a tree engrossed in reading a novel, and entirely unconscious of the child and its surroundings. The sun was shining directly upon the latter's face; its head had slipped off the pillow and was thrown uncomfortably

back, and the fastening of the strap had chafed its body, which was bruised in consequence for weeks. Pushing forward, the mother caught up her little one and burst into tears at sight of its beseeching look. It seemed that the friend who had brought her there had passed through the park on her way down town, and, in going by this spot, had heard a child crying, and, womanlike, had passed that way to see the cause. She recognized the baby at once, and then saw the nurse off in the shade of the tree. In spite of her eager desire to catch up the child and carry it home, she knew it was the least discreet course to pursue, for there was no policeman near, and the girl might have been ugly. So, carelessly arranging the baby, she walked away despite the cry, "Mamma," "mamma," which the little sufferer sent after her, and went after its lawful mamma.

This friend C., you observe, unlike B., preferred to afford her children all the benefits she could gain by hiring servants, and she was not to blame for the untoward result.

She might fairly think her baby was safe in its carriage with its nurse in the park, and so it would have been had the nurse been, in anything but the name, "Help."

But what shall we do to get good "help" for such people as the Cs., and the Bs., and the rest of the world? And what substitute can

we have for the present unsatisfactory reference business?

There is little dependence to be placed in the written documents shown by the candidates for positions. And women should be told, if they are not already aware of it, that they are mainly to blame for the present disorder in the domestic help ranks. It is they who give worthless servants good recommendations, sometimes to get rid of them. They pay ordinary girls from twelve to sixteen dollars a month, and the best hands get no more. And when you have considered the amount of money that is paid, you have counted only one item. Boarding, breakage, loss of time, and other things, run up the cost of any but a really good girl to a fearful sum.

There are two sides to the question undoubted, and we have considered only one; but the truth is not any more palatable on the one than on the other side, and the error is equally divided. Until a better class of women enter the domestic service, and labor there as rivals to the present army of raw recruits now engaged in the field, there will be no improvement in it; and this will only be when honest work is looked upon with more favor than it is now by the majority of women, and when American girls throw aside their senseless prejudice against the honorable task of keeping the house in order.

WOMAN AT THE SOUTH AND AT THE WEST.

[Here are some of the observations of a lady, one of the editorial excursion party who took the last summer's trip of a few thousand miles South and West. She gives her impressions of the women North, South, and West. We may premise that she is herself from the East, and eminently an impartial witness.—ED. A. P. J.]

FROM Saratoga, the gay summer metropolis of the North, where fashion in fantastic form and parti-colored dress rules the throngs of pleasure-seekers, to the White Sulphur Springs of Virginia, the favorite resort of Southerners during the warm weather, is a journey of but a few hours; yet, between the two places, the differences are marked and striking.

Saratoga lies among sand banks, heated and dusty; the White Sulphur Springs rest in a basin, surrounded by hills and mountains wooded to their summits, and down whose

sides cool breezes sweep by day, and upon which gentle dews are shed by night. The scene in front of the Congress or Grand Union hotel scarcely differs from that before the Grand Central of New York. At White Sulphur stillness is the rule; noise, the exception.

Not less distinct are the mineral springs of the two localities. The Northern waters bubble, effervesce, exhilarate and leave the mouth and throat in a glow; the Sulphur waters are soft and soothing.

The throngs who gather in these two places partake of the character of their surroundings. The typical woman of Saratoga is a dyed, bedizened creature, dragging painfully a weight of apparel, which, however tiresome, must be worn in order to be seen. The lady of the South dresses less fashionably, and, perhaps,

less tastefully, but her attire is worn more naturally and, consequently, more gracefully. Her manners, too, have a softness and gentleness peculiarly her own. There is pride in Virginia, but of a long line of descent rather than of dress or display. The old Virginian lady had great strength of character, together with the air of good breeding, derived from her English ancestry. While the lord of the plantation engaged in war or politics, or careered over the country on his fleet horse, his wife remained at the family mansion, rearing carefully her children, controlling a large retinue of servants, and maintaining in elegance the Southern hospitality on an exchequer so impoverished that it required the ingenuity of a Wall-street broker to prevent a total suspension. It mattered little to her that the table-cloth was not of the finest damask, nor the plate heavy; but, if the supply was meager or badly cooked, woe to those in charge. She would have stifled in a city, where houses have no "spare room" for company, and where society is limited to street promenades and three-minute boudoir calls. Her friends came to her accompanied by children, servants, horses, and dogs, and remained till they became almost a part of the family. Commodious as her mansion was, it often overflowed with her generous hospitality, yet no one went unwelcomed from the door.

Her mantle has fallen on a large portion of her descendants, the fair Virginian ladies of even to-day. A stranger coming among them is not carefully measured and afterward welcomed; but, after a greeting so cordial as to bring out his best qualities, he passes, if at all, under review. Yet these gentle manners do not indicate a lack of character. There are sorrowful tales connected with the once gay mansions of Southern aristocracy.

Passing westward as the country changes, the old Virginian civilization is left behind; but the characteristics of the Eastern and Middle States have radiated from their hill-tops over all the Western plains. Love of country may be nurtured on a flat prairie, but never a love of *home*. One place is like another. There is nothing to attract the eye save the one spot on the Western horizon where the sun, wreathed in prismatic glory, sinks nightly to his rest. Therefore, the woman of the West, though proud of her country, of its boundless resources and capacities, is ready at any time to follow the call of Westward, ho! The West will ultimately be a land of large cities with sparsely settled plains between.

A lady who lived on the flat land in sight of the snowy peaks of the Rocky Mountains was asked, "Do you feel contented here?" "I could never stay if I had not those mountains to look upon," was the sudden and enthusiastic response.

Away out in the Indian territory is Muskogee, a place noted chiefly for its numerous graves, few of whose inmates died a natural death. Here the traveler, weary and famished, is told to expect his dinner. So, for an hour or two, he eyes eagerly the conductor and brakeman, and attends carefully to the melody of the steam-whistle, in anxious expectation of the bourne of that half-day's exertion. At last it is reached, and, before the train has stopped, he is on the platform looking for the hotel. The only object in sight is a long shed of rough boards. His first impulse is to return, but the thought of the long afternoon impels him, and he scornfully enters. How agreeable is his surprise at finding a repast, neat, tempting and luxurious, even to fly-fans, while the hostess and Indian waitress, clean and fresh, smile upon their guests.

Neatly-dressed children are playing at the door; and the pet antelopes lay their soft heads in the laps of those sitting at the table. "Do you like this life?" was asked of the pleasant hostess, a former resident of Illinois. "I dare not stop to think. I could not stand it if I did," is the smiling reply.

On Gray's Peak, at timber line, where it takes two hours to boil potatoes, where it is so cold the mosquitoes dare not be abroad after 4 P.M., and nothing edible can grow, a lady, gentle and refined, lives with her son, a miner, and keeps a hotel for the entertainment of travelers; her shade trees only pines and spruces, her pets the mountain conies and weasels, her bouquets the delicate, low and sweetly fragrant Alpine flowers. The young man, remarked, "You should have seen this house when mother came here; it was only logs and dirt." Now, the walls are papered, the floors are carpeted, calico curtains have divided it into apartments, pictures adorn the walls, and some well-selected books and papers show how the quiet hours are spent in the log house on the mountain.

Right opposite this hotel, hundreds of feet up a perpendicular wall of rocks, which can only be ascended hand-over-hand on ropes, are miners' cabins, fastened on rocky ledges by iron spikes. Here a woman found her way, clambered, and made her home.

In these three is found a type of the West-

ern woman. By nature she is a pioneer, pursuing her business with knowledge, energy, and tact that would make it successful in any location, but without any of that coarseness and impudence that, at the East, distinguish women in her situation in life. Even among the Western ladies of wealth the same qualities of unconquerable energy and perseverance are plainly discernible.

It is very amusing to one accustomed to think of the "oldest inhabitant" as a decrepit, bowed centennarian, to have a young and beautiful lady tell how she and her husband came to a now large, flourishing, and tree-embowered city when it was a prairie without a shrub, and that they were as happy in their log-cabin home on the wild as in their present mansion, with its flowering grounds. Truly, "home is where the heart is," and the heart of the Westerner embraces his whole boundless domain.

But in one beautiful valley, bounded by the gray-green, billowy slopes of the Wasatch, the Western woman bears a different character. She is, on this lovely plain, no longer the heroic, energetic, adventure-loving, patriotic being who responds so joyfully to the call of "Westward, ho!" but she has become subdued in manner, and more exclusively devoted to her children, and as truly a martyr to her

faith as the Hindoo woman whose body shrivels and crackles on the funeral pile of her dead husband. Where religious faith involves the sternest sacrifices, offering in return only an approving conscience, there is something noble and beautiful. Such is the woman of Salt Lake. She willingly consents at the command of her church to share with one younger and fairer than herself that single love, her dearest blessing on earth. Yet more, she thrusts aside or subdues her jealousy, and taking this young creature to her heart nurtures her tenderly and fits her to surrender her happiness to another whenever the mandate goes forth from the hierarchy. She is bereft of happiness by no sudden blow followed by a rebound, but by the endless screw daily turning, slowly but surely stretching the heart-strings anew with each succeeding revolution. She is quiet; she is apparently indifferent; she sits and tends her child and fixes her gaze on the distant hills girdling her home, as if she were seeking beyond the snows a glimpse of the great Father on whose loving bosom the weary martyrs find rest. But if woman chiefly suffered at the cross, she was first at the resurrection; and the Mormon woman will likewise be first to see the light which Christian civilization is radiating over all her country.

M. L. C.

THE WAY TO DO—IS TO DO.

NEVER, perhaps, has the world asked after deeds as now; never has it been so impatient of thought, so eager for fact. It cares little for the preliminary process by which a result has been reached; it is the result itself in which it is interested. Facts are not to be denied; therefore, facts must ever be more potent than words. What a man does, we accept as proof positive; what he says, we fling to the winds when it contradicts the deed itself. A man talks of a new scheme or a new invention, and we laugh at him; he accomplishes it, and we honor him. What, therefore, the present age demands is *doers*, not *dreamers*. To insure success in almost any undertaking implies the harness, the reins, and the workshop. A man who is anxious to achieve must consent to lose himself for a while, if need be; he must be satisfied if he is learning *how*; but few are willing to put forth this effort which

lies at the foundation of all true success. We are such an impatient people that each in turn tries to jump the stream by which a careful knowledge is attained; if we get across, no matter how, that is all we ask for, and then we begin to scramble up the steep and slippery banks on the opposite shore. We console ourselves by saying, "Who knows how we got over? we're here in the ranks, that's enough!" But the climbing soon shows the difference, and who have made suitable preparation for the journey. The world wants workers, but it wants skilled work; if we can only meet this demand there is enough for us to do; if we can not, no one cares to hear the reasons why. To dream of success and to put forth the effort which secures success are altogether different affairs; and so, while the requirement was never so great as now for those who have ability to do and achieve, the world is full

of dreamers, talkers, praters; people who imagine they know all things because they can talk about a few, and who really know nothing. The great demand is, "Show us the proof! can you *do* this *thing* of which you prate? then we want you; if not, go!" At one time, when Sparta was in distress, envoys were sent from the surrounding states to assure her of their willingness to render the needed assistance. One rose and made an elaborate address, in which he detailed the generous liberality of his country, and speci-

fied what service she would render her sister state. As he seated himself, another rose and remarked quietly, "What this man has *said*, I will *do*." Workers are apt to be reticent. It is the thought, then the action; their enthusiasm and vitality must be expended upon the deed itself, not in talking about it.

Though you can not "hew giants out of rocks," you may "cut heads upon cherry stones;" only do it well, skillfully, and the world will acknowledge your ability.

J. A. WILLIS.

BEYOND.

BEYOND the mountains and the main
Lie lands where roses bloom again,
All glorified;

The sweet, fair roses, white and red,
That in love's bosom found their bed,
And then—have died.

Beyond the valley and the stream
Lie lands where youth's immortal dream
Waits later age;

Therein love lingers, looks, and longs,
And sings the old, familiar songs
On life's worn page.

Beyond! beyond! oh, lands of love!
If close at hand your confines prove
Or far away,

Oh, lands beloved! I grow more fond
Of happy hopes that lie beyond

Life's little day. W. E. PABOR.

CLOUDS THAT PASS.

WHAT sorrow is there in this wide world to which we may not, in time, become accustomed? It is so dreary in our home. Music and laughter, and joyous, happy talk, seem stilled forever; the sun does not shine as it used to, and there are so many rainy days—ah, so many now, for we only see through tears! The very bird-notes, trilled from the cage o'erhead, are shriller, and so discordant, though a few days since we listened enraptured to the melody. The busy sounds of life are everywhere around us; the stroke of the workman's hammer strikes sharply upon our ears, and the endless din of clattering wheels, the tread of eager, restless feet, are heard in the street below. All things are as they were, yet not the same—no, *not* the same, and never can be again, we think, bitterly, for is *she* not gone, and with her light, and joy, and gladness? Did she not take with her all that made life lovely—even hope? We know not how time passes—we reckon it not by months or days.

Somehow we find ourselves slipping back again, half mechanically, to old ways. We

see and hear old sights and sounds, and are conscious that they please, as in other days. There is more sunshine now, and the rainy days are few. Ah, traitor eyes, that forget to weep! The past, freighted with its heavy woe, seems drifting away slowly, slowly, like a boat far out at sea, until it is but a glimmering speck, the wavering shadow of a sail upon the ocean of the present. And now we hear, as though for the first time, the clamor of daily cares and duties long defined; the world is calling us again, and forth from that long trance of sorrow, from that wretched stupor of heart and brain, we come, at last, remembering that we are still young, and that life, with its work to be accomplished, is yet before us; life that holds for us, if also its cares, its many pleasures still—aye! even pleasure, where *she* is not. And Hope, the blossom that she bore to heaven's starry gates, lo! it has dropped from the blue heights beyond, and blooms anew within our hearts. The sharpness of that first great grief is past, and we think sometimes, even yet, that we could not live it o'er again. But how tender God is of us all! so tender that the sorrows which have been hardest to bear He lets us half forget.

GLEN CAROL.

A ROYAL PAIR,

THE DUKE OF EDINBURGH AND THE GRAND DUCHESS MARIE-ALEXANDROVNA.

THE royal household of Victoria of England is rapidly enlarging, marriage after marriage of her many eligible children taking place. Now it is the Duke of Edinburgh who claims the attention of all good and

according to late dispatches; and when the bridal party shall enter England, it is determined to give them a cordial reception.

The betrothal of these distinguished persons is said to have been the result of certain



THE GRAND DUCHESS MARIE-ALEXANDROVNA.

loyal Englishmen as having secured a right good match in the person of the Duchess Marie-Alexandrovna, the only daughter of the Czar Alexander of Russia. The marriage ceremonies—for there were two, one in the Greek and the other in the English fashion—took place on the 23d of January. All England is quite jubilant over the affair,

passages of true love, and not a mere procedure of state policy. The Duke is said to have made the Duchess' acquaintance while a midshipman in the royal navy, and when on a visit to St. Petersburg; to have fallen in love with her then and there, and always to have entertained the idea of their marriage. In the spring of last year the

Duke visited the Grand Duchess and her mother at Sorrento, and from that time negotiations were conducted for the union, and, after some few difficulties had been removed, were satisfactorily concluded. The Duke will probably live part of the year in England and part in Russia. The princess will retain her own religion—namely, that of the

so far, but rather conducive to his comfort and ease. His head, phrenologically considered, does not strike us as evincing any very marked talent, yet it bears the impress of good culture and refinement. The head is broad enough for an exhibition of considerable energy, should circumstances require special effort on the Duke's part, and there is



THE DUKE OF EDINBURGH.

Greek Church—but the children, if there be any, will be brought up as Anglicans.

The Duke is about thirty years of age, and has been regarded in European court circles as a very desirable catch. He is a true son of Albert and Victoria, and a really handsome man, as appears by his portrait. He has not found life burdensome or vexatious

a good degree of the constructive element, and also of the prudent and economical manifested in the development of the side-head. The expression of the features is not so open, generous, and hearty as we would have it, but the portrait may be faulty, and not the original.

The Grand Duchess is a really charming

young lady, as is apparent in the portrait, of twenty, having been born October 17th, 1853. She brings to the lucky fellow who has secured her affection a dowry of a million, and a yearly stipend of one hundred thousand dollars. Quite enough to enable them to keep house comfortably!

We like the appearance of the girl as the engraving represents her. There is less of

the putty finish which we have been accustomed to see in the pictures of European princesses. She is evidently wide-awake, clever, and appreciative of her position and its obligations. She resembles her brother, the Grand Duke, who visited America a while ago, and quite captivated us by his cheery good-nature and intelligence. May she never have cause to regret the step she has taken.

Department of Physiology—Our Sanitarium.

Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

VAMPIRES, AND VAMPIRISM.

BY ALEXANDER WILDER, M.D.

OLD writers have treated of races of superstitious creatures wandering over desert regions of the earth to prey on human beings. They seem to have been common to all countries, although more frequently found in the deserts of Arabia and Persia. The Latin poet Horace speaks of the *lamie* that devoured youths and children; and Ovid, Pliny, Tibullus, Propertius, and Petronius, of the *Striges*, that delighted in like revels. Perhaps the best description of these sirens is found in the tale of *Sheherazade*, on the fifteenth of the *Thousand and One Nights*. A young prince lost his way while hunting, and encountered a beautiful female weeping bitterly. Taking compassion on her, he seated her behind him on his horse. Arriving at the ruins of a house, the lady alighted and went in. The prince was following, when he heard her address her children inside: "Be glad; I have brought you a handsome young man, and very fat." They answered her: "Mother, where is he? hasten, that we may eat him, for we are very hungry." The young prince perceived that she was an ogress, wife to one of those savage demons called *ogres*, that live in out-of-the-way places, and make use of a thousand wiles to allure and devour persons. He therefore mounted his horse, and, disregarding her blandishments, rode away as fast as he could.

Most famous of all these was Lilith, the reputed first wife of Adam. She is depicted by the Rabbi Ben Sira as being the mother of wicked demons. Finally, having pronounced magically the secret name of God, she became utterly abandoned to evil. Her passion was to murder young children, which could only be averted by exorcism. She attended the bedside of child-bearing women to destroy their offspring; and, in the guise of a beautiful young woman, allured young men and children, in order to feast upon them. Goethe, in the *Walpurgis night*, makes Mephistopheles caution Faust against her wiles:

"Beware of her fair hair, for she excels
All women in the magic of her locks;
And when she winds them round a young man's
neck
She will not ever set him free again."

—*Shelley's Translation.*

Once, also, is this same ogress and mother of demons named in the Bible. We quote the amended version of T. K. Cheyne, of Baliol College, Oxford: "She [*Idumea* or *Arabia Petrea*] shall become a habitation of wild dogs, and a house for owls. Jackals and wolves shall meet there, and the satyr shall light on his fellow; surely Lilith shall repose there, and find for herself a place of rest."—*Isaiah* xxxiv. To escape her the Hebrew women made use of an amulet during

their *accouchement*, and for a month afterward, inscribed with the Hebrew words, *Adam Heva hutz Lilith**—Adam, Eve, without Lilith.

In later times, naturalists, taking the hint from these legends, have designated a genus of bats by the name *Vampirus*; and it is asserted that these creatures actually possess the blood-sucking propensity attributed to their prototypes and namesakes. The term "vampirism" is, therefore, a suitable designation for the practice, imperfectly understood among us, of recuperating the energies of the aged, the enervated, and the infirm, by contact with the young and vigorous. A forcible example of this is that of King David, as described by the author of the first (or third) book of Kings: "Now King David was old and stricken in years; and they covered him with clothes, but he gat no heat. Wherefore his servants said to him: Let there be sought for my lord the king a young virgin: and let her stand before the king, and let her cherish him, and let her lie in thy bosom that my lord the king may get heat. So they sought for a fair damsel throughout all the coasts of Israel, and found Abishag, a Shunammite, and brought her to the king. And the damsel was very fair, and cherished the king and ministered to him." Lord Brougham is reported to have had a residence in France during the later years of his life, where young maidens were maintained for the same office.

Of the morality of this practice let the reader judge. It appears to us to be generally heartless and selfish. There are, doubtless, exceptions to such unfavorable judgment, which we will endeavor to indicate; but the *rationale* of the matter is fully written on knowledge of physiological law. We disapprove of the old and the young sleeping together, of the consumptive and the feeble occupying apartments, or even being much in company with the more healthy and vigorous. The writer, distrusting his own ability to cope with such physical infirmities, has long

been careful for many years not to consort unnecessarily with those who are so afflicted. It is generally known to be an unwholesome practice to hold the hand of the dying.

Of course, to the bestowment of vital energy for the purpose of benefiting, we can not object, so long as it is wisely and discreetly done. The mother feeds vitality as well as milk to her babe, and does it from the first, even in the womb. The intimate conversation of friends, lovers and married pairs, is a sort of anastomosis of their blood-vessels and nerve-tubes. In this, when due regard is had to the "higher law," the life of each is enhanced and magnified in volume, and all is well. There is in these things a giving which does not impoverish, and likewise a withholding which does not conserve, but saps the life.

An example of this is related in another essay. One day a gentleman, a total stranger, called upon the late Dr. Armand Trousseau, of Paris. He introduced himself as Lord Seymour, an English nobleman. He was robust, and looked as if he was the personification of vigorous health. After a few words were interchanged, the visitor explained his errand. "Doctor," said he, "I am not well. It appears as though my strength were failing me. A strange lassitude has possession of me. I feel—indeed, I scarcely know how I feel."

Dr. Trousseau often diagnosticated by intuitions and impressions made upon him by patients. He read man like printed books. As Lord Seymour was speaking, the doctor looked steadily upon him, with a slight tremor perceptible.

"You fall asleep every day immediately after dinner," he remarked.

"Yes," replied the nobleman, "that is true." The doctor continued:

"You are unmarried; you have no family, and are without the ties of home-life."

"Very true," answered Lord Seymour.

"What you want is not medicine, but affection," said the doctor. "You want the ties and the affections of home. You must have something, some one for whom to live. You are pining away for this. You must form household relations, and so give aliment to your heart, or you will be a dead man before eighteen months."

* This word is an adjective of the feminine gender, from *lil*, night, and is translated by Noyes, in the passage above, night-spectre. The common version renders it "screech-owl," which is also the definition of the term *strix*. The idea behind all these legends is the seduction of the young, especially those of the other sex, and banqueting on their blood. Voluptuousness is one element in the seduction.

Lord Seymour smiled skeptically as this judgment was delivered. When the doctor had concluded, he laid on the table a bill of five hundred francs (\$100) and departed. Dr Trosseau's advice was neglected, but his prediction was verified. In the space of one year and three months Lord Seymour died from a general wasting away of his physical powers.

So true is it that the person who benefits nobody, when life has no communion with that of others, who is isolated and "insulated" from interior association with them, having no spiritual, social, affectional ties to unite the springs of life with theirs, is one of those monsters that Nature seems to be constantly laboring to destroy. Dissociation from fellow-beings, whether from selfishness or involuntary, is followed by premature decay of faculties, precocious aging, and untimely death. Old persons are hurried to the grave by being separated, through the officiousness of those around them, from the society of persons who cheer and interest them. The precepts, "Thou shalt love thy neighbor as thyself," and "Do as you would be done by," relate as well to physical life as to moral right.

The phenomena of mesmerism have greatly familiarized us with these facts. Every person is constantly elaborating an *aura* or "nervous fluid," and giving off emanations as well as those which are more purely corporeal. It is, as has been shown, no harm to us that these are taken up by others; we have them to spare. In our every-day life such matters are more or less reciprocal, like the offices which business and society impose upon us all, and are, therefore, not generally injurious, but often mutually beneficial.

The celebrated Madame Hauffé, "the Seeress of Prevorst" (Württemberg), long subsisted by virtue of this mysterious law. Her life hung in the body as by only a solitary thread. A single nerve seemed to enchain her to it. She depended upon the organic strength of other persons, which she received chiefly through the eyes and ends of her fingers. Others felt that she took strength from them. Weakly people felt weaker near her.

Hence, it will be perceived that the mesmeriser, as well as the apostle of religion,

should "lay hands suddenly upon no man," lest in the loss of vitality and contracting of morbid conditions, he become "partaker of other men's sins" and disorders. This liability is as probably the reason which prompted the command of Jesus to his seventy neophyte disciples: "Salute no man by the way."

It is said that physicians have recuperated patients by placing upon their bodies the skin, intestines, or other parts of animals just slaughtered. The Roman Empress Poppæa used to bathe in asses' milk while it was yet warm from the udders, in order to prolong her youthfulness. In France, where neither kings nor nobles regarded the lives or personal rights of the people, it used to be affirmed that the lords, exhausted and benumbed from exposure or debility, would cause the bodies of peasants, their property, to be cut open that they might be warmed and invigorated from the animal heat. A law is said to have restricted the slaughter to two on any single occasion. A few years before the Revolution, the passions of the populace were exasperated by the rumor that the royal princes, afterward Louis XVIII. and Charles X., had caused young children to be kidnapped from their parents, for the purpose of regaining that vigor wasted in debauchery by bathing in their blood. The endeavor to restore life and youthful vigor by the transfusion of blood is based upon the same idea.

We have our ogres, vampires, and lamiaæ in the more esoteric form. Blood-sucking and anthropophagy are not fashionable except in their figurative sense. Old men, emulating King David, wed more youthful women, to prolong their own existence thereby, and in our matrimonial odalisk-market young women sell themselves for this purpose to procure means for subsistence and fashionable display. We have often observed invalids artfully securing healthy persons for room-mates. Young children are frequently required to share the beds of those older than themselves. They would have been about as fortunate in the hands of King Herod. These are not imaginary evils. Though not described in medical books, they are as real as contamination from bad air, the effluvia of corpses, or the emanations from diseased persons or fermenting earth.

It is not many years since these sources of disease were ridiculed as whims and credulous fancy; and religious people, supposing themselves intelligent, used to call the epidemics of plague, typhus, yellow fever, and cholera, "visitations of God," to be averted by penitence and prayer. The proposition to obviate them, as recently suggested by Lord Palmerston, by drainage and hygienic precautions, was regarded as a sacrilegious flying into the face of Providence.

We would have like care taken to secure protection against the more subtile form of malignant contagion. If pure air is essential to health, so, also, is a pure vital atmosphere. From every person is exhaled an *aura*, wholesome or noxious, according to his peculiar condition; and as the chameleon takes color from the objects surrounding him, we are liable to be debilitated and poisoned by the sucking away of our vital energies and the absorption by us of our morbid emanations. It is worthy of a thought whether our more acutely developed susceptibilities do not lay us more open to contagion and infectious disease. Very possibly, too, more diseases are contagious than is supposed. Fortunately, however, health is more infectious than any disease, and is a perfect safeguard and prophylactic against every malady. Debility and fatigue open the door.

A vampirical practice is common in our social life, which is, perhaps, one of the subtilest forms of abstracting vitality from others. Idle persons are greatly addicted to it, and it is analogous to the manner of the leech in fastening upon other animals to open their veins and suck their blood. It consists in drawing unwary persons into intimate conversation, and thus producing an outflow of their energy, which is greedily and almost instinctively absorbed from them. Many lean-spirited persons go to class and prayer meetings to get such nourishment; and the popular, "successful" preacher is he who has most vital and nervous power to minister to such as have it not. The richest life is often taken away by those who are unworthy, and the loss is by no means easy to replenish.

The first evidence of such waste of vitality is *tristia*, or sadness, analogous to that experienced from excessive study, loss of sleep,

or undue sexual indulgence. Debility, intellectual torpor, nervous prostration, enfeebled digestion, are common sequences; not unfrequently aggravated into tremor, hypochondria, hysteria, female disease, St. Vitus' Dance, and even pneumonia, catarrhal disease, and consumption. A fearful caution are these ailments to put us on our guard against unwholesome companions, promiscuous society, and exhausting discourse. The bandit who steals the purse often injures less than the vampire who robs us of health and vitality, or the malignant person who blights our vital powers by calumny.

We are all of us infected by the moods, whether cheerful or morbid, of those around us. Some make us sad; others gay; others fill us with a healthful, glowing cheerfulness; others quicken us till we can almost think like a spirit, with sharpened intellect, and the volume of our life enlarged. Others deaden us till we can hardly feel, think, or hope, sucking out our best life from us like a sponge. We thus "die daily." These things act upon, influence, vivify, torpify. Ill-temper, weakness, and disease are communicable in this manner; and this vampirism and poisoning by noxious emanations should be avoided as we would avoid the contagion of the plague, cholera, or small-pox.

The remedies are essentially hygienic. Some endeavor to find temporary relief in stimulants, alcohol, wine, coffee, and tea; but these things do not meet the real trouble. Far better is the method of Mr. Jaggers in "Great Expectations," who used to "wash off" his clients with perfumed soap and water at the end of a day's work. The more thoroughly this is done the better. Brisk exercise in the open air, also, adds oxygen to the blood, and so restores energy to the mind and nerves. But sleep is invaluable and indispensable to enable the attaining of a normal equilibrium. That sensation of vacuity, "goneness," humiliation, enfeebled purpose, is largely corrected by "tired Nature's sweet restorer." Reading a healthy-toned book is excellent; but usually intellectual exertion should be light. Some of these demons only go out "by prayer and fasting." The body, likewise, should be recuperated by abundance of wholesome

food, due care being taken to avoid indigestion. Self-discipline is most essential of all; the person should treat himself like one that is over-fatigued, or that has undergone a severe strain upon his energies, carefully

avoiding any extreme in conduct, discipline, or regimen. The object is to get rid of a morbid or devitalized condition, brought on by association with insatiable vampires more pitiless than the grave.

THE SIAMESE TWINS, ILLUSTRATED.

THE sudden death of these strangely-born persons, on the 17th of January last, has awakened a profound interest throughout the country, and there is so much that is attractive

a specific time. They were exhibited in many places in Europe, everywhere exciting much attention, especially among scientific men. It would seem that they were not treated alto-



THE SIAMESE TWINS AT TWENTY-FIVE.

in their history, that we can not forbear a fresh sketch of their career. The Siamese twins, commonly known as Chang and Eng, were born about 1811, were received from their mother by Captain Coffin and Mr. Hunter, in a village of Siam, where the last mentioned gentleman saw them, fishing on the banks of the river. Their father had been some time dead, since which they lived with their mother in a state of poverty. They were then about eighteen years old, and had been confined within certain limits by order of the Siamese government, and supported themselves principally by taking fish. Their exhibition to the world was suggested to their mother as a means of bettering their condition, to which proposition she acceded for a liberal compensation and the promised return of her sons at

gether according to agreement by Capt. Coffin, for a man by the name of Bunker was led to take measures to free them from the species of slavery in which they were held, and, in appreciation of his kindness, they adopted Bunker's name, and began giving exhibitions of themselves under the style of E. and C. Bunker. They came to the United States about thirty-five years ago, and the success with which their tours from state to state were attended is too widely known to need detail here. With the profits of their exhibition they settled on a farm near Trap Hill, in Wilkes County, N. C., each marrying, and so forming a complete household relation. A writer in the N. Y. *Herald* relates the circumstances of their respective marriages with so much raciness that they are worth repeat-

ing. He says: "It was during one of their tours through the United States, traveling as they did at the time in an open barouche of their own, that they visited a place called Trapp Hill, in the adjoining county of Wilkes.

was in 1843. In a very short time Eng evinced a decided liking for Miss Sarah Ann, or Miss Sally, as she was called; a courtship followed, and, to make the story short, Eng proposed, was accepted by the damsel, and a marriage



THE SIAMESE TWINS AT SIXTY.

Here they made a stay of a few days, and here it was they made the acquaintance of a family called Yates, with whom they became very intimate and friendly, the attraction being two young ladies, respectively named Sarah Ann Yates and Adeline Yates. This

was the immediate result. Chang, though a partner of Eng in everything else, was not a partner in his connubial joys and felicities, of which he was constantly reminded, and this state of single-blessedness became very irksome to him. He grew miserable and quarrelsome,

and nothing could be done to please him, and this sort of companionship was quite disagreeable to the newly wedded pair. How was it to be remedied, was the question that agitated Eng's and his wife's mind, when, suddenly, one day, with a woman's tact, a bright idea struck Mrs. Eng, and she lost no time in communicating it to her husband. She had a panacea for all Chang's woes, and this was that he should marry her sister Adeline. Eng smiled serenely at the proposition, Chang brightened up at it; but the next question that presented itself was, 'Would the young lady agree to come into the family as a wife as well as a peacemaker?' Mrs. Eng said, 'Leave all that to me, I will fix that.' And sure enough she did. By her persuasive eloquence Miss Addy was won over, and in two weeks from the date of Eng's marriage there were two Mrs. Bunkers."

In 1847 they removed to the large plantation, upon which Chang's family still live, in Surrey County. In 1847 they dissolved the partnership, which had maintained hitherto, in their material affairs, owing to family infelicities, and Eng bought an adjoining plantation. Hereupon a compact was formed, which brings the character of the brothers into a strong and most creditable light, to the effect that every alternate three days should be reserved exclusively to each of the brothers to do as he pleased. For instance, the three days that belonged to Eng were spent at his house or anywhere else that Eng might choose to go. During that time Chang was merely an appendage of Eng, having neither the right to go anywhere that Eng did not choose to go nor the power to attend to any business whatever of a private nature of his own. In the same way, when Chang's three days came, and they were punctual to a moment, they departed at once for his home, where he assumed supreme control of the actions and movements of both, and Eng became the nonentity. So exact were they with this rule, that no event, however great in importance, and no stress of weather, no matter how severe, could prevent them starting from the house of one to the house of the other, when the three days of either had expired. It is related of them that this rule caused one to leave his home just as the marriage of his daughter was about to take place, and the other was prevented from attending the funeral of a son by the stringency of this singular compact. They carried it out to the last, for Chang's final three days had expired on the Thursday evening prior to their deaths,

and though it was very cold, misty, and severe weather, to Eng's house he would go, in accordance with the agreement.

The singular physical bond which united them in life and death is described by an eminent physician as "being, at its shortest part (the upper and back part), about two inches long. At the lower front part the band, which is there soft and fleshy, or rather like soft thick skin, is about five inches long, and would be elastic, were it not for a thick, rope-like cartilaginous or gristly substance, which forms the upper part of the band, and which is not above three inches long. The band is probably two inches thick at the upper part, and above an inch at the lower part. The back part of the band, which is rounded from a thickening at the places where it grows from each body, is not so long as the front part, which is comparatively flat. The breadth or depth of the band is about four inches. It grows from the lower and center part of the breast, being a continuation of the cartilaginous termination of the breast-bone, accompanied by muscles and blood-vessels, and enveloped, like every other portion of the body, with skin," etc.

Mr. Hale, of New York, taught the twins to speak and write the English language, and was their almost constant companion for five years. He testifies to their general good-nature, and the warm interest exhibited by the people of Surrey County in them, and the general regret of all, whites and blacks, now that they are dead. Although not educated, in the common sense of the term, they had become tolerably well informed on matters of practical value to themselves, and observed closely the progress of public events in this country and Europe. All their children—and those surviving are many, on Eng's side seven, and on Chang's nine, two of whom are deaf mutes—were provided with good educational advantages, and are intelligent and promising. Two or three are married and occupy good positions in the society where they reside. In health the combined weight of the twins was 210 pounds, which was exceedingly light compared with that of their "better halves." Their hospitality was famed in the region where they lived.

Whether the same blood circulated through the veins of both or not, it is certain they were very different in temperament and character. Eng was mild, amiable, gentle in his disposition, and pleasing in his manners. Chang was the reverse, having a very irritable disposition and violent temper, always ready to take

offense and quick to quarrel at the slightest umbrage. Eng will be recollected as the larger of the twins, Chang the smaller. Numerous instances are related (some of which are, of course, exaggerated) of the unhappy domestic consequences of Chang's violent temper. Sometimes at table during their meals he would fly into a passion, spring up, and, seizing the table-cloth, would jerk all the plates, dishes, and eatables off the table and scatter them in fragments all over the room. A favorite way of displaying his temper was to drag a feather bed across the room and pile it on the fire. Repeatedly he fought desperately with Eng—a hand-to-hand combat, the latter always acting on the defensive.

When they visited the office of the *PHRENOLOGICAL JOURNAL*, soon after their arrival in America, it was noticed that the head of one was larger than that of the other, and that one possessed a sharper observation and a more active intellect, while the other had more of the gentle and winning characteristics of human nature. We give two illustrations of these men, the first representing them as they appeared about thirty-five years ago; the second as they were shortly before their death.

In our next we hope to be able to state the exact nature of the relation which united them; whether or not it was vital. An examination by surgeons has been agreed upon, and we shall soon know the result.

EARLY HOURS; OR, EARLY RISING.

BY THOS. F. HICKS, M.D.

A GREAT deal has been written about early rising; much that was sensible and some that was silly. There can be no doubt that "early to bed and early to rise" are excellent concomitants. The night was made for rest and the day for labor. In modern society the order is sometimes inverted. This can not be done, however, continuously without loss, for nature's plan is always the best. Should we persistently retire early and rise early our volume of life and power would doubtless be greatly increased. But, if we justify ourselves in making exceptions to the rule of early retiring (as most people do), we are justified in making corresponding deviations from the rule of early rising. For nature must have rest, and he who robs himself, for any long period of time, of necessary sleep will surely suffer nature's retribution. To urge early rising, without reference to hours of retiring, may be productive of mischief. If people would stop urging early rising, for a time, and urge early retiring, they would probably do more good; for he who retires regularly at an early hour can hardly lie late, if well; while he who usually retires late can not rise early, as a rule, without becoming ill. There are a few instances on record of persons who have sat up late and risen early and have lived to mature age. But such instances are rare indeed. Most men who sit up late, by a kind

of necessity, lie late in the morning. George Peabody retired at two o'clock and rose at ten or eleven. Winship, the strong man, often retires late, and, to restore the balance of his system, rests till nine, ten, or eleven o'clock, as he may feel the need. But does any one think this is the better way? Would not Peabody have lived longer and, on the whole, done better work had he retired at ten and risen at six? And would not Winship be just as strong of muscle and steady of nerve if, instead of being a night-owl, he retired at dewy eve and rose with the early dawn?

Let not those, however, who rise early be indiscriminate in their blame of those who lie late. Some literary men have so confirmed themselves in a habit of night-work that they can do more work by night than by day. By day they do not feel like writing, but just as other people are getting ready for sleep the inspiration of genius seizes them, and they write on and on for hours; sometimes till one, two, four o'clock, and sometimes, even, till daylight. Then, spent and exhausted, they fall into profound sleep, and do not wake till nine, ten, or eleven o'clock. Now, for such a man to get up after having slept but an hour or two, under the notion that "early rising is always best," would be simply suicide. We are acquainted with a Philadelphia minister, an author and preacher of more than ordinary name and

power, whose habits are as above described. He insists that the interruptions to labor by day are such that it is more economical for him, every way, to work by night, and by insisting, also, on his morning sleep, he has thus far been able to keep good health. But suppose, under the advice of some one having the early-rising mania, he should "get up when other folks do," how long would he be able to work?

One morning Mr. S., one of Pastor E.'s parishioners, called at ten o'clock to see him; was told "Dr. E. is not up yet." The astonished man went off and told a doleful story of "our lazy minister," not knowing, poor man, that his faithful minister had been toiling at his desk the night previous six hours after he himself had retired to rest.

The conclusion of the whole matter is, that we must look at the subject sensibly. If you *must* be up late, sleep late; but if you have the courage to retire early you will find it the better way. You will then need no lesson on early rising. Having good, quiet, abundant rest, during the night, you will be early awake and ready to rise.

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INFALLIBILITY.—It is curious to observe how people, who have the utmost contempt for any claim to religious infallibility, obey their doctors with implicit faith. "The doctor ordered it," is reason enough for doing an absurdity. The doctor orders a young man to smoke, and his blood and nerves are poisoned for life. He orders a scrofulous child to be fed on bacon, or a consumptive patient to spoil an already poor digestion by drinking gallons of nauseous fish oil. The infallible doctor drenches a feeble, constipated patient with aperients and cathartics, when a proper diet would at once remove all difficulty. There is not much religious superstition now to complain of, but medical superstition is as rife as ever, and quackery more brazen and more triumphantly successful. Not satisfied with destroying health, there are doctors now engaged in undermining morality. The sole remedy is the education of the whole people in physiological knowledge—the knowledge of the science of life; but we do not see that either Oxford or Cambridge has put this subject on the list for its examinations.—*Dr. Nichols.*



NEW YORK,

MARCH, 1874.

DO YOUR OWN THINKING.

CHILDREN who are subject to parental authority, and are not yet capable of distinguishing between right and wrong, must have their thinking done for them. So of common servants, slaves, imbeciles, the insane, and such others as are not capable of forming correct judgments. But it is meet for mature MEN and WOMEN to think for themselves. Take counsel from your seniors or your betters, when necessary, but try to "have a mind of your own." It is pitiful to meet grown-up men and women, who, like a flock of geese, follow, thoughtlessly, the lead of some designing fox, who seeks to feather his nest at their expense. Time was, when "the one-man rule" prevailed, in certain countries, and it was then "master and servant." So in morals, where the priest dictated the faith and doctrine by which souls were to be saved or—lost. *Then*, those who had minds of their own, and dared to exercise them, were beheaded, burned at the stake, or tortured on the rack; but, thanks be to common schools, to the development of science, and the dissemination of knowledge, those dark days have passed, and we now live in a land of liberty, where neither emperor, nor king, nor pope, nor priest, has a single right, as an individual, not equally enjoyed by the humblest citizen.

This government is a Democratic Republic, in which each and every citizen has a part, and is in duty bound to support and defend. He is not a good citizen who shirks this duty. Our liberties depend on a proper administration of our laws and government. Neglect on the part of the ease-loving, the

affluent, and the law-abiding, throws the offices into the hands of the low, base, and dishonest, and hence the frauds practiced on the people. Unless good men come to the rescue, and attend to the selection of trusty servants to fill places of trust, we shall continue to suffer these abuses.

Rings and cabals have been formed to thwart the will of the people, and to pervert our laws, in the interest of factions, cliques, and parties, rather than to have a care for the good of the State and the nation.

When all men do their own thinking we shall have a new order of things. Honest and capable men will be chosen to our legislatures to take care of our public monies and to manage public affairs.

Parents should teach their children to think for themselves, that they may not forever be "led by the nose." Example: My son, what do you think of this or that?—submitting a proposition. A thoughtless boy will reply, "Oh, I don't know." Another will answer, giving his opinion according to his best judgment. Then the parent should lead him on, and in time—say, when of legal age—he will be able to form an opinion of his own, without assistance.

Some parents are arbitrary tyrants, and give their children no opportunity. They hold them in slavish subjection, demanding obedience and exacting service. If a child asks permission to do this or that, he is sternly refused, and sometimes sent off with a growl or a curse. "Father, may I have this bit of board to make a sled or a box?" "No; put those things away; what business have you with them? If I catch you again with my hammer, hatchet, or nail box, I'll box your ears." Or it may be a father says to his growing girl, "Put away *my* newspaper, what are you doing with it?"

What sort of a man—not to say citizen—will such a boy become? Or what sort of a woman will that girl make? Who will do their thinking for them, when their foolish father dies?

When we break—train, discipline—a colt for service, we are careful not to over-load him, lest we discourage and injure him. We lead him gently, handle him kindly, and prove to him that we are no less his *friend* than his master. We should be no less con-

siderate in our treatment of children—of immortal souls. If children be trained to think and to act independently, we may look for originality; while, on the contrary, if forced into narrow channels, circumscribed, and "hushed up," or forced to swallow the dogmas of doctors, priests, and grannies, they will become echoes, imitators, and shadows, instead of "bright and shining lights" in the world. It is a blessed thing to be a brave, bold, daring, self-relying, manly man. It is humiliating to become a miserable slave to Mrs. Grundy, to bad habits, or to a *human* master.

When brave young Crittenden was commanded to kneel on his coffin to his executioners to be shot (in Cuba, where so many young patriotic Americans have been shot), he replied, "I *kneel* only to my God!" How different was it with half a hundred others who, like whipped spaniels, accepted a foreign religion, through a foreign would-be Mediator, and then went down on their knees to be shot and killed like so many dogs.

This world was made for man. It is his to make the most of it. His accountability is not so much to pope, priest, or potentate, as it is to God. Let him make his calling and election sure by complying strictly with all the conditions which secure usefulness and happiness, here and hereafter, by fulfilling all the functions of body, brain, and soul which belong to a manly, godly man.

TALKING, READING, WRITING.

WHEN mothers teach their children to talk, they should require them to speak *distinctly*. When reading, they should speak all their words *clearly*, and when writing every word should be written *plainly*. How very few pay any special attention to these important points! What can be more interesting in conversation than to listen to a clear, well-modulated voice, expressing good sense through a kindly, well-disciplined mind? or, to listen to a really good reader, whether from the Bible, or the Pilgrim's Progress, or Æsop's Fables, if he read or speak with exactly the right accent, and in the right tone and time, it is at least a good substitute for classical music. Why are not all intelligent persons educated to read

aloud? It would be a real accomplishment; far better than a knowledge of all the common games, dancing, etc.

Then as to *writing*. Oh, the *luxury* of clear, round, handsome penmanship! We do not care for flourishes; indeed, they have no business in business letters; they should only be indulged in when "practicing," or when learning to write. If not vulgar, it is egotistical to introduce much flourishing in letter-writing, book-keeping, or anywhere else. A clear, plain round hand is always best, and the one who writes it secures therein, and thereby, excellent mental discipline. By proper care, and by taking the necessary pains to have good ink—not pale-blue, watery stuff, which crucifies one's eyes to read—good pens and good paper, the desired end will be attained.

Then, if a correspondent desires prompt attention, he must give his exact address *in full*, with post-office, county, and State, leaving nothing to be *guessed* at, and inclosing the requisite stamp for a reply, when on his own business; and then having properly directed and posted his letter, he may reasonably hope to receive the answer he wants. Why can not everybody learn to talk *distinctly*, to speak *clearly*, and to write *plainly*?

RESURRECTION OF PHRENOLOGY.

THE London correspondent of the *Graphic*, in speaking of the recent announcements of Dr. Ferrier, to which we have more than once called the attention of our readers, says:

"The astounding discoveries made by Professor Ferrier respecting the possibilities in the hands of scientists in regard to the manipulation of the human brain, have been widely commented upon by the public press. Dr. Carpenter and the President of the British Association, before whom the lecture was delivered, have stated with emphasis that no more important discoveries have been made since Kirchoff, Frauenhoffer, Bunsen, and Huggins developed the capabilities of the spectrum."

Further on, he says:

"The result of these extraordinary discoveries is practically to restore Phrenology to its proper place in the ranks of the sciences. This is admitted by Dr. Carpenter, the great physiologist, who has heretofore been so strong an opponent of Phrenology.

"The advantage which the present experiments seem to have over those of Gall, Spurzheim, and of Combe, arises from the use of chloroform, which in the times of the old phrenologists was unknown. Ferrier guards the disturbing effects of the general activity of the nervous system by lulling it to sleep with chloroform, secure that he will so lessen the sympathetic action which characterizes it, that a specific excitement will produce its own effect, unmingled with any secondary induced activity, which, in a more excitable state of the system, would inevitably accompany it."

[We supposed there must be death before there could be resurrection, and we were not aware that Phrenology had ever died. On the contrary, from its birth it has been a live and growing child. Its foster parents nursed it kindly when the wicked Herods sought to kill it, but, like Moses of old, it grew into the stature of—an accepted science—and now its supporters are as numerous and as respectable as are the Children of Israel. But why did the Herods seek to take its life? For the simple reason that it, like all great discoveries in science, exposed their ignorance and proposed to correct their errors, and give a scientific basis in place of whims and superstitions, for a true mental philosophy.

People, like children, are pleased with something new. Professor Ferrier teaches nothing new in Phrenology only a new and positive method of demonstrating some of the functions of the brain. He will, no doubt, be discounted in the course of a few years, as the vain scribblers of half a century ago sought to discount or belittle Drs. Gall, Spurzheim, Combe, and others. Those who, because of their inharmonious brains and prejudiced minds, wish it dead, will have to wait in vain.]

DR. HALL'S NEW CHURCH.

THE new church edifice for Rev. Dr. John Hall, now in course of erection at the corner of Fifth Avenue and Fifty-fifth Street, New York, will, when completed, be the largest Presbyterian church in the United States, if not in the world. The ground alone cost \$350,000, and the building, it is estimated, will cost \$500,000 more. This is a large outlay; but a much larger building than the one now occupied by this congregation was rendered necessary by the remarkable success which has attended Dr. Hall's preaching

during the six years that he has been officiating in this city. His present church, at the corner of Fifth Avenue and Nineteenth Street, is altogether too small to accommodate the crowds that flock to hear him. In the afternoon, as well as in the morning, of every Sabbath day the pews not only are filled, but camp-chairs have to be placed in the aisles, and still many people are obliged to go away, not being able to find even standing room. We think, therefore, that Dr. Hall's people, who have among their number many of our wealthy and influential citizens, acted wisely in taking measures to extend their popular pastor's influence. A congregation with a building that seats but a little over 1,000 has no right to monopolize the services of such a man as Dr. Hall. It is expected that the new building will be ready for occupancy next November.—*N. Y. Times*.

[How would it do to put less money in these grand church structures, in which men profess to worship God according to the teachings of the meek and lowly Jesus, and more money, time, and service in efforts to reach, educate, and elevate *poor*, "wicked sinners," whom Christ came to save? Eight hundred and fifty thousand dollars! That would go a great way toward civilizing and Christianizing the heathen, who sin and suffer in our streets, our prisons, alms-houses, and "on the rocks," in the near vicinity of Fifth Avenue and Fifty-fifth St. "The *poor* shall have the Gospel preached to them." How?]

HEREDITARY CHARACTER.

THE gross lines are legible to the dull; the cabman is a phrenologist so far—he looks in your face to see if his shilling is sure. A dome of brow denotes one thing, a pot-belly another; a squint, a pug-nose, mats of hair, the pigment of the epidermis, betray character. People seem sheathed in their tough organization. Ask Spurzheim, ask the doctors, ask Quetelet if temperaments decide nothing, or if there be anything they do not decide? Read the description in medical books of the four temperaments, and you will think you are reading your own thoughts which you had not yet told. Find the part which black eyes and blue eyes play severally in the company. How shall a man

escape from his ancestors, or draw off from his veins the black drop which he drew from his father's or mother's life? It often appears in a family as if all the qualities of the progenitors were potted in several jars—some ruling quality in each son or daughter of the house—and sometimes the unminced temperament, the rank, unmitigated elixir, the family vice, is drawn off into a separate individual, and the others are proportionately relieved. We sometimes see a change of expression in our companion, and say his father or his mother comes to the windows of his eyes, and sometimes a remote relative. In different hours a man represents each of several of his ancestors, as if there were seven or eight of us rolled up in each man's skin—seven or eight ancestors at least—and they constitute the variety of notes for that new piece of music which his life is. At the corner of the street you read the possibility of each passenger in the facial angle, in the complexion, in the depth of his eye. His parentage determines it.—*Emerson*.

[And this is *one* way in which our bodies are resurrected. The son is the resurrection of his father, as his father was of his grandfather, great-grandfather, etc., back to the beginning. The resurrection of bodies is constantly going on, and will do so to the end of time. Of course there is a little mixing, but the principle is all the same. Nothing is lost; something is gained.

We wish parents would so arrange things that there should be fewer idiots and imbeciles; fewer knaves and wicked sinners brought into the world by *their* ignorance, drunkenness, and sinning. It would be more in accordance with God's laws to recreate or resurrect sound bodies and sound minds, than the scores who fill our asylums, prisons, and hospitals. To secure good fruits, grass, or grain, we are careful to secure good seed, good soil, and good cultivation. Are not human beings of much greater worth?

"As ye sow, so shall ye reap."

DEATH OF DR. LIVINGSTONE.

THE distinguished missionary and explorer, David Livingstone, is no more, having died in Central Africa while on his way from Lake Bembe to Unyanyembe. The

information has come so directly this time that there can be little or no doubt as to its positiveness. The whole Christian world experiences a pang on account of the loss of so bold, earnest, and efficient a worker in the wilds of Africa, where his labors were expended as much for the benefit of the negro and the suppression of the slave-trade, as for science. In our next number we shall devote space to an appreciative sketch of this useful and good man.

PRE-NATAL INFLUENCES.

ON the 18th of November last a middle-aged lady, with a boy twelve years old—it being his birthday—called at 389 Broadway for a Phrenological examination of the boy. It appeared that the mother had promised to purchase books for the boy, and he consented to call with her at our office with this understanding. But when she had reached the inner office—the examining-room—the boy, suspecting that he was to be questioned, criticised, or to have something done not to his liking, demurred. Indeed, he refused to enter, but was finally dragged in by the mother. He was assured by the examiner that no harm would be done him; that the object was to ascertain, if possible, in what way he could make the most of himself, and that *his* interests were to be considered. After being seated, his mother standing by, he turned and looked her in the face and exclaimed: “*You lied to me to get me in here.*” The mother, half apologizing, said that she had promised to buy him books, and that she still intended to do so.

It will be seen from the above the sort of disposition and training the boy must have had. He was described as possessing a frail or fragile body, with a large, and over-active brain, with a bright intellect, strong social affections, but almost destitute of moral or religious sentiment. He had immense Cautiousness, and hence was shy, suspicious, and with Secretiveness also large, was wary and cunning. He was advised to take a course of training in a military school, where he would be disciplined in body as well as in mind. He readily assented, saying it was just what he wanted.

We need not describe in detail what more was said to the lad, though a full and careful description was given. During our description, finding he was much wanting in Hope, Spirituality, Conscientiousness, and Ven-

eration, we stated that there must have been something singular in the boy's earliest history; that he must have been born under peculiar circumstances; that the condition of the mother must have had a marked effect upon this singular formation; and after completing the examination, we inquired what it was. The mother burst into tears, and said that the boy's father was killed in the war some months before the child was born; that she remained in a most sad and anxious state during all this time; sometimes she was without tidings of her husband for weeks, and finally such tidings were received as completely overwhelmed her; in fact, information which declared her a widow, and her unborn child an orphan! The mother removed to her own father's family, remaining a year or more, when he, too, died, and left all in a comparatively helpless condition. This great grief, added to that of the death of her husband, kept her, as might be expected, in a state of continual gloom for a long period, during which the child was, most of the time, between life and death, the mother without appetite, and the child subsisting upon the least possible amount of food, so that he grew but slowly. Finally, the mother came to New York city, established herself in a boarding-house, where she now resides with this unfortunate son.

We submit the above as an interesting fact in psychology. The mother corroborated our statement as to the particulars of the boy's disposition, and lamented his sad deficiency in morals, but seemed to take pride in his bright precocious intellect.

Question: Suppose this lad should commit some inconsiderate or rash act, violating some civil law, what ought to be done with him?

The phrenologist would say at once that he was morally deficient; that he was not fairly developed, nor fortified against even common temptations. Society would probably say, “Imprison him or hang him.”

We leave the subject to the consideration of those who are capable of appreciating such conditions.

RIGHT conduct is that which is approved by the whole moral and intellectual faculties, fully enlightened and acting in harmonious combination.

TRUE philosophy is a revelation of the Divine will manifested in creation; it harmonizes with all truth.

Department of Literature, Science, Education.

STUDY AND REST—A REVERIE.

AFTER a day of hard study I was sitting, late one evening, in a semi-dreamy state endeavoring to rest, preparatory to resuming my studies, when methought I heard in the distance a great confusion of voices. As they drew nearer, I discovered that they proceeded from a company representing the various guardians and attendants of mortals, engaged in active debate. As they approached I began to distinguish the different voices, and to realize from sentences that reached me now and then that the subject of their controversy for the moment was myself. The first voice that became audible to me was that of Prudence, who appeared to be urging my release from some duty for the night, which I found to be that of study. At the same time I saw Ambition moving about uneasily, as if preparing to defend his view of the question, and turning the leaves of some huge volumes, as if collecting evidence. "This person is weary," said Prudence, with a half-defiant glance at Ambition, "and if my wishes have any weight with this assembly, I shall counsel her immediate retirement to rest." "And I," said Sleep, in a deep voice, "command this, for I am Nature's confidential servant, and am also the bearer of sundry penalties, which I am intrusted with authority to inflict if any message is disregarded." Indolence now looked up with a smile of triumph, and was about to speak when Ambition impatiently thrust him aside, and exclaimed, "Who is this Nature that thus presumes to urge upon us her commands and penalties? Indeed, I consider it a case of most flagrant usurpation, and shall look into the matter immediately, and, I doubt not, silence this presumptuous rival! I have assumed control of affairs for the present, and shall not be gainsayed by any petty messenger that may trespass on my territory! As for threats, I scorn them, and the bearer as well!"

Pride now took the floor, and in a dignified manner said, "I shall heartily support

Ambition in the position he has taken; indeed, I am surprized at the disloyalty that exists among you. The advantages derived from his proposed laws and operations admit of no question; and we can not fail to perceive that present comfort is a feeble consideration when compared with the rewards he promises. As the prime minister of Ambition, I am acquainted with all his projects for the ennobling of the human race, and can show you many a glorious star in the firmament of fame that owes its elevated position and lasting brilliancy to his personal aid and invaluable precepts. His presence and counsel nerved the arm and stimulated the courage of—" "Hold!" exclaimed another voice, which I had not heard before; but, on looking around, I found it to proceed from a very plain-looking person, named Industry. "Are you the trumpet of Ambition, through which he thunders his oratorical bombast?" questioned Industry, in a sarcastic tone. "Pray control your soaring fancy for the present, and confine your attention to the business of the hour. As for Ambition, he can not but acknowledge that I have bridged many of the difficulties over which many of his subjects have passed in triumph; and I demand that, in justice, he allows his co-partners in labor to share his glory."

Several were evidently becoming excited, and I began to be somewhat apprehensive, when Experience arose. I observed that in him the impetuosity of youth was toned down to a grave impressiveness, and that he did not attempt to gain attention by noisy acclamation. After a short pause, during which order was restored, and all composed to respectful silence, he began:

"My friends, as one of the oldest members of this society, I venture to speak my mind concerning this matter. You appear too eager for the establishment of individual authority to be altogether just. Some seem to have forgotten that we are all subject to the control of Nature, whose ambassador

Sleep has declared himself to be, and whose authority they seem disposed to set at naught. Concerning Ambition, his triumphs, both literary and military, are necessarily of a perishable nature. They may flourish for a time, but as for the former, its brightness is eventually destined to be obscured by the dust of oblivion, because of the absence of those vital principles upon which true literary fame must be founded, namely, the elevation of the intellectual and spiritual, and the purification of the moral nature of man. And concerning the latter, though its heroes possess unsurpassed genius, and rear for themselves monuments they deem imperishable, the martial glory that is fed by the agonies of bereaved hearts and the spoils of ravished nations can not preserve its luster

through the succeeding ages that herald the dawn of enlightened justice and universal refinement; but, as the years roll on, many of the stars that still sparkle on the heights will fall, and those that remain will be discerned by future generations only through a mist of blood and tears."

At this point, I, who was the first cause of this extended controversy, saw that they had wandered so far from the original subject, that my case still remained undecided; and was about to betake myself to my books once more, when I found that Sleep had stolen a march upon me, and, by some means unknown to me, had succeeded in weaving a mystic web over my brain, in which my ideas became so hopelessly entangled that I was fain to obey his bidding, and retire to rest.

EDITH LYSLE.

THE SHAKER PROBLEM—No. 3.

DEAR EDITOR: My reasons for not sooner noticing the brackets so profusely interspersed among my answers to your twenty-five questions in the last August number of your JOURNAL, are the sickness and decease of a brother, which claimed my attention. If agreeable to you, I now propose to notice those of most importance. They are like little shrubs that one grasps while falling down a declivity, which, when taken hold of, immediately give way, when another and another is clutched with the same sad result; but they serve the good purpose of easing the fall.

Now, the Shakers are spiritually right or wrong; if wrong, it becomes the duty of those who perceive it to point out wherein; if right, it is obligatory on them to make it manifest to the world by letting "their light so shine that others, seeing their good *works*, may also glorify their Father in heaven."—Matt. v. 16. It is an old saying but true: If you wish to learn your faults, listen to what your enemies say; but I prefer a candid friend, whom I take you to be, and hope that you, or some writer for your JOURNAL, will continue to point them out without reserve.

Bracket No. 1. We want with us in God's Kingdom only such as are striving to be good. You say, God wants (in his kingdom) all mankind—good, bad, and indifferent (!) What a kingdom! What! are not the sheep to be separated from the goats? are the good not to be distinguished from the willfully bad?

2d. You ask: Was it the righteous or sinners Christ came to save? Ans. He came to save sinners *from* their sins, not *in* them. The saved are those who find a visible order of God, and these confess their sins, forsake them, and live free from sin. Those who will not do this have not power to cease from sinning, are not saved, and must be classed among the goats, and can not enter God's kingdom.

3d. "Physical reform is best continued through right generation." While I yield to you the palm in physical knowledge, I must not be censured too severely for entertaining some scruples in regard to the position here assumed. Christ and his followers advocated and practiced the reverse: *regeneration*, not *generation*—right or wrong. If they were mistaken, then are we. Jesus Christ, our exemplar, gave few lessons on mere physics, though being "made in all respects like his brethren;" but of soul reform he was the teacher of all teachers. The 144,000 that followed him were *virgins*.

4th. Of the wedding garment, you ask if we are sure we are right? Ans. To us the evidence is clear. Some of the invited guests could not control their selfishness. The less guilty begged to be excused; but the reply of the married was to the point, "I have married a wife, and therefore can not come." From these examples it seems obvious that the rejected were not self-controllers, but were "sensual, having not the spirit; walking after their own lusts,"—Jude.

5th. You ask how we know what Zion expects? "Have you [we] been there?" Most assuredly; we are there now.

6th. You say, Let Shakers beget Shakers, etc. This they are doing; but not in a natural, generative, or worldly manner. That would be impossible. They must cease to be followers of Christ, and become worldlings, before they can do so. They would thereby become "children of this world, who marry and are given in marriage," and would cease to be among those who are counted worthy to obtain the resurrection from the dead, where they neither marry nor are given in marriage, but are as the angels [not yet angels themselves, but like the angels].—Matt. xxii. 30. They would be like the young widows whom Paul advised the Church not to receive, "For," says he, "when they have begun to wax wanton against Christ, they *will marry*, having damnation, because they have cast off their first faith" [which was not to marry, but to live a pure virgin life, after the example of Christ.]—Tim. v. 11-14.

7th. Shakers are something besides spirits—will notice this by-and-by.

8th. You ask, Why we sit in judgment? "Do ye not know," says Paul, "the saints shall judge the world?" If the followers of Christ—"though in the world, yet not of the world"—are the saints, and those who do not follow him are the world, why should the latter complain of being judged by the former? Or, shall the world judge the saints?

9th. You say of my fifth answer: It is both unscientific and unscriptural; that there is no danger of the world being burned in the way the Shakers seem to fear.

Assertions unproved always bring more or less suspicion on one's solid arguments. It is far easier to say a thing is unscientific than to prove it to be so. The earth contains the area named, more or less, and that population increases on its surface in a given ratio is indisputable; and though it contained double the area named, the reasoning would hold good; and although *you* may have other means to stay the tide of population, it is still evident that the proposition is mathematically scientific. It is not the Shakers who fear a literal conflagration of the external world. Now, those who are really concerned for the continuance of the world, let them advocate the Shaker or Christ plan, which is to burn up the world in the human breast; and in proportion as this is done, which must be gradual, propagation will be checked, and the world con-

tinued. Either this, or wars and pestilence, greater than the world has ever known, are all that can continue the human race on the earth five centuries more! Else there is no truth in mathematics, nor in effect following its cause.

10th. "Oh, the egotism!" etc. "We *know* that we are of God, and the whole world lieth in wickedness."—1 John v. 19. Was the beloved apostle an egotist? If he was, so are we, because we know the same that the apostle John did.

11th. "So few!" you exclaim; and then add: "Were *you* appointed to sort the acceptable ones?"

Ans. Certainly. If the saints, the true followers of Christ, who constitute God's kingdom on earth, are not to judge who are acceptable, who shall? Must it be worldlings? Perhaps you will say *God*. Very well; but how? It must be God in the seeker, or God in the world, or God in the saints—which? But you say, "Go slow, Mr. Shaker, and quote the Saviour, 'Judge not, that ye be not judged.'"—Matt. vii. 1. This caution Christ gave to brethren who were equals, whose first work was to remove the beams from their own eyes. Christ, while on earth, was the seat of judgment for the world. This judgment he gave to his successors when he left, and it still remains with his true followers. Now, what say ye?

12th. Christ was a Communist. Ananias and Sapphira got into their difficulty by their dishonesty. There are many Ananiases and Sapphiras, in this day, struck dead to the spirit, carried out and buried in the world.

13th. You ask, "Do not the Shakers own and let out land as other professed Christians do?"

Ans. Not at all. We have said Shakers own no land by absolute right and title. They once had this right, but it passed away from man in the general consecration to God and his service, reserving to themselves, and to you, and to your children, and to all nations, peoples, kindreds, tongues, or color, the right of **USE AND OCCUPANCY** who will confess and forsake their sins, and follow Christ in the regeneration by leading, like him, a pure and holy life. *Any one, every one*, the whole world over, can come and occupy this consecration just as freely as those who now occupy it by living the pure life above stated. Is this the way other professed Christians do? If so, then they are Shakers.

But do they not sell land? you pertinently

inquire. If they do, the consecration only changes its form. Suppose 100 acres of land builds a house, no one nor ones have a personal right to the house any more than they had to the land. They have the right of the *usufruct*—*i. e.*, to use and occupy it so long as they remain true to the covenantal compact, and no longer. But any human being now existing between the poles has the same right, on the same conditions. Thus, you see, the principle of selfishness is destroyed to an extent nowhere else accomplished under the shining sun. Are we now understood? Is this the way other professed Christians do?

14th. Emasculation. Is, like Paul's circumcision, of the heart, in the spirit, and not in the letter.—Rom. ii. 29. Outward emasculation would avail nothing, but in the heart everything. The eunuchs for the kingdom of heaven's sake are such as in *heart* deny themselves, not such as externally incapacitate themselves and retain an adulterous heart. Now take the vote, if you please.

15th. "Those who will not follow Christ he can not save," you repeat, interrogatively. Can not? If omnipotent, why not?

Ans. 1st He is not omnipotent. He is not the father, but the son of the father. He is what Paul tells Timothy: "For there is one God and one mediator between God and man—the *man* Christ Jesus."—1st Tim. ii. 5. He can't be mediator between two and be either of the two himself. Though a chosen man, he was between God and mankind. Since it has pleased the Father to bestow on man freedom of thought and action, and since salvation depends on man's obedience to the son, it follows that the son can not save the willfully disobedient. This is the "why not."

16th. "Pauper children." The Shakers do not depend on pauper children to keep up the institution, but on finding a few "self-controllers" among the mass of mankind.

17th. I will now notice bracket 7. Shakers are something besides spirits. It would have been more true and to the point if you had said Shakers are something besides *bodies*. Bodies are only fictitious, fleeting, fading tenements or present coverings for the real Shaker; they exist for a moment and disappear. If there is any truth in philosophy, or if the deepest thinkers of this or any other age have found a truth on which all agree, it is the fact that the body forms no part of the man. If this be true, then, our friend is mistaken in saying Shakers are something besides spirits. All that I have noticed agree and have enun-

ciated the fact that the *ego* and *non ego*, the spirit and body, are contradictories, and distinct; that the phenomena of each are governed and controlled by different laws. Socrates, in his dialogue with Alcibiades, maintains it. Bacon and Descartes, fathers of modern philosophy, affirm the same. Locke and his personal friend, Le Clerc, adopt the same. Reid says: "They (the mind and body) are separated by the whole diameter of being." Laromaguere: "Between an extended and unextended substance there can be no connecting medium." He, with Socrates, denies that the body is any part of the man; and Plato says: "The soul is in the body like a sailor in a ship—that the soul employs the body as an instrument, but that the energy, life, or sense is the manifestation of a different substance," etc. All agree with Laromaguere that "the unextended (the mind) can have no connection by touch with the body." He thus disposes of the plastic medium between soul and body that some contend for: "This hypothesis is too absurd for refutation. It annihilates itself, for between an extended and unextended substance there can be no middle existence, these being contradictory. If the medium be neither soul nor body, it is a chimera; if it is at once body and soul, it is contradictory; or if, to avoid contradiction, it is said to be like us, a union of soul and body, it is itself in want of a medium."

So, my dear friend, you must perceive that we are something besides body. But as it is to us as the ship to the sailor, it needs some attention, and as this seems to be your greatest concern, go on and mend up the leaky vessels and build new ones; we can sail more safely in a good ship than a poor one. But let us agree as to our prerogatives; while yours is with the ship, ours is with the sailor—then let us fraternize. While you are mending up the old hulks and making new ones, you must permit us to trim the sails and show the sailors which way to steer to the haven of rest and harbor of peace—peace, sweet peace! which none but the truly honest cross-bearer and follower of Christ can ever find.

Kind friend, I have written the foregoing with a subdued heart, as it were by the side of a dying brother, with a deep sense of the little span of time allowed me here, sincerely and earnestly, and in the kindest spirit of true friendship for yourself and the many readers of your excellent JOURNAL, hoping that some may be induced to come and see if these things are so.

H. L. EADES.

HINTS ABOUT SPONGES.

EVERY school boy and school girl knows what a bit of sponge means at sight, its aid in cleansing the slate of his or her efforts in computation or in off-hand drawing being regarded quite indispensable. But very few, we think, of our young readers have yet learned

Gould class sponges with vegetables, while Johnston and Bowerbank assert for them the animal nature. Like plants, they remain attached to one point during the whole of their undisturbed lives, and when injured in any way there is no indication of pain or sensibility; and they do not appear to possess the power of voluntary motion, a characteristic of animal life.

Their resemblance to animals consists in the structure, and so marked is that resemblance that the naturalist is usually disposed to classify them as such. Taking the common sponge as found in its ocean bed, we find it made of a tough membraneous tissue ramified by a net-work of fibrous-horny matter, with numerous channels and spaces of different sizes within the substance of the sponge, while at the surface are innumerable minute openings or pores, with here and there a large opening. This tissue, with its included fibrous network, constitutes the skeleton of the plant or animal, and when alive it is filled up with a thin gummy substance, very like the white of an egg. When the sponge is removed from the water this jellylike fluid drains away, and the sponge dies. Examined in the living state beneath the water, a steady current is seen to issue from the vents or large openings on the surface, while a flow of water as steadily proceeds inwardly through the pores.

Sponges vary much in form; in some the *vents*, or large openings, are disposed in little conical prominences like the crater of a volcano; some have the shape of a hollow cylinder, which, hanging from an angle of a rock, has its pores all upon the outer surface, while the vents open into the interior, and their united discharge is made from the lower end of the cylinder. Sponges may be multiplied by artificial division, each section becoming a new growth. They propagate naturally by detaching little round gelatinous bodies called *gemmules* from their tissue, which



A SPONGE TAKEN NEAR THE STRAITS OF GIBRALTAR.

what a sponge is and how it is obtained. The scientific name of this family of organisms is *spongidae*, or *porifera*, and whether belonging to the animal or vegetable kingdom is a point not well settled among naturalists. Agassiz and

swim hither and thither, and at last fasten on the ocean rock and begin the process of development.

These singular formations are found on almost all shores, and not only in the sea, since

one species is peculiar to fresh water. The main sources of the supply which meets the demand of commerce are the Mediterranean and the Bahama Islands—sponges are more numerous and of finer quality in the warm regions of the globe than in cold,—and are obtained mostly by divers, trained for the purpose from childhood.

After removal from their ocean home, sponges are prepared for the different uses of civilization; first, by being soaked in dilute muriatic acid, which disposes of the limey and silicious matter pervading their substance; then they are bleached and beaten. Smyrna is the chief

place for the export of the fine, delicate sponges we see in the drug shops. The coarse, rough articles in common use for washing carriages, horses, and for performing duty in the kitchen, come mainly from the Bahamas.

The engraving is a view of a singular and very beautiful sponge, taken from the bottom of the ocean with a dredging apparatus by an English scientific expedition off the Straits of Gibraltar. This sponge, called the *Rossella velata*, was secured at a depth of over 3,900 feet below the surface; its peculiar characteristic is the possession of an outer veil of delicate filaments extending to a considerable distance from the body of the sponge. D.

TIMBER AND ORNAMENTAL TREES—HOW TO RAISE THEM.

BY DARIUS H. PINGREY.

THE farming lands of our country form a grand estate, whose wealth can only be realized and developed by an industrious and enlightened agricultural people. One of the greatest wants of the present is some incentive to stimulate every landholder in the East, and especially in the West on our vast prairie regions, to give practical attention to the subject of growing timber and ornamental trees. We need these trees for fuel, for building purposes, for fencing, for the mechanical arts, and for shade and beauty. The value of the timber used for fuel annually in this country is \$75,000,000, and for fencing \$150,000,000. The number of railway ties in present use in the United States is 150,000,000. The average yield per acre of timbered land is 200 ties; hence, 750,000 acres of land has been cleared to furnish the present supply. Railway ties last about five years; therefore, 30,000,000 ties are used annually in the repairs of railways, taking the timber on 150,000 acres. There is consumed in the manufacture of rolling stock the timber of 350,000 acres, and the supply of 500,000 acres more for other purposes every year. Our railways are stripping the country of 1,000,000 acres per annum, and the demand is fast increasing. This is but one cause of the deforestation of our country which has been going on for the past decade. The production of wood for fuel and the mechanical arts had, heretofore, been almost neglected, on account, probably, of the vague views prevalent with regard to the growth of timber. Now there is an awakening, and American farmers are becoming interested in tree culture.

In Europe the forest belts are planted on the

hills and mountain sides, because the rich valley lands are demanded for the production of food for the dense population. But few varieties are cultivated. The walnut takes preference for permanent growth, the nuts of which are made into flour and used as bread. Different varieties of evergreen trees grow in the various sections of Europe. The favorites, in general, are the Austrian black pine and the Norway spruce. The black locust has been exported from this country to Europe, where it grows with great satisfaction and profit to the landholders. The proprietors of land in Europe are now paying much attention to the honey locust for hedges. The European larch is native in the forests of the Tyrol, and is adapted to various climates and soils. The valleys and mountain sides of the Tyrol are covered with this larch. The European larch has generally been planted in great Britain with good success. The greatest wealth of some of the Scotch estates consists in their forests of planted larch, which bring a large annual income to the land proprietors. The plantations of the Duke of Athol, in Scotland, are famous, and have been the means of stimulating to extensive planting of this tree in other countries.

In Baden, and in other German states, and in some of the Departments of France, the law compels the planting of a tree in the place of the one cut down along the roadside; in this way, miles of rows of shade trees line the roads, making pleasant shaded walks through all the towns and villages.

The seeds of all nut-bearing trees should be planted in the fall in ground well prepared

with plow and harrow. Mark the ground out in a similar manner as for corn. Drop the nuts from one to two feet apart. It is advised to plant acorns, hickory, and chestnuts, as soon as they fall; cover two inches deep. Walnuts should be covered three inches deep. Always mulch the rows with straw. Plant on dry land, and cultivate three years, after which the plants will take care of themselves. The European larch can not be too highly recommended. It grows rapidly, is strong and durable. The tree is beautiful, and grows as straight as the masts of a ship. The wood is valuable for almost every purpose, from a telegraph pole and farming timber to the finest cabinet-work.

The Missouri Railway Company has inaugurated a system of tree planting between Lincoln and Lowell, Nebraska, a distance of 120 miles. Their last experiment is of special interest to the farmers of the country. Their method is as follows: the prairie is broken up the year previous to planting. In the spring the ground is planted in a variety of ways, according to the age and condition of the trees. Some are laid in a trench made by plowing. The following is the list of the number planted, variety of forest trees, and the result:

Ash, two years old.....	20,000
Box elder, two years.....	11,000
Honey locust, one year, hedge.....	144,000
Soft maple, one year.....	18,000
Soft maple, two years.....	60,000
European larch, two years.....	72,000
Scotch pines, transplanted and not pruned....	20,000
Norway spruce, transplanted and not pruned....	6,000
Cottonwood sprouts.....	28,000
Cottonwood cuttings.....	82,000
White Willow cuttings.....	92,000

Total.....553,000

A subsequent examination of the trees gives the following percentage alive and in a thrifty condition: Ash, 98½; box elder, 92; honey locust, 92; soft maple, 83; European larch, 82½; Scotch pine and Norway pine, each 80; cottonwood cuttings and sprouts, 72; white willow cuttings, 75; giving an average loss of 15 per cent., most of which is found in the evergreens and cuttings. The lowest percentage of loss is found in the ash. The railway company has decided, therefore, to refill with one and two year old ash trees.

The following is a list and measurement of varieties growing on an Indiana plantation:

	Feet.	In.
Catalpa, planted 15 years; circumf.....	5	3
Ailanthus, " 24 " ".....	5	6
Tulip-poplar, " 22 " ".....	5	6
Sassafras, " 40 " ".....	5	6
Cottonwood, " 42 " ".....	5	0
Red oak, " 50 " ".....	10	9
Black walnut, " 15 " ".....	3	6
White pine, " 19 " ".....	3	6
Chestnut, " 17 " ".....	4	6
Black locust, " 38 " ".....	8	0

The following grow on an Ohio plantation:

	Feet.	In.
European larch, planted, 20 years; circumf.....	2	9
Paper birch, " 20 " ".....	2	6
Red cedar, " 20 " ".....	2	3
White elm, " 20 " ".....	3	6
White pine, " 20 " ".....	3	6
Norway spruce, " 20 " ".....	3	6
Australian pine, " 20 " ".....	3	9
Ailanthus, " 20 " ".....	3	9
Burr oak, " 20 " ".....	3	9
Silver poplar, " 20 " ".....	4	3

These have grown without special cultivation, but others, in cultivated ground, measure as follows:

	Feet.	In.
European larch, planted, 20 years; circumf.....	4	6
White pine, " 20 " ".....	3	6
Paper Birch, " 20 " ".....	3	6
Deciduous cypress, " 20 " ".....	5	0

Timber trees, in general, increase their wood-making capacity in about the same ratio as the square of the number of years indicating their age. The third year they make nine times; the fifth year, twenty-five times; the sixth year, thirty-six times; and the tenth year, one hundred times the amount of wood they make the first year. Trees grow more rapidly as they grow older, and, therefore, should not be cut down till they have grown ten years or longer.

In Europe very little split wood is used for fuel. Small branches, from an inch to three inches in diameter, are the usual size for fuel. Cultivated trees are often cut down, but the cutting is managed as follows: Suppose the landholder has 50 acres of timber, he will cut five acres the first year and five the second, and so on for ten years, till he has gone over the whole; then he begins again the same process, commencing where he first began.

It is difficult to advise what varieties to plant. A few suggestions may be appropriate. The white and blue ash are especially valuable, and should be extensively cultivated. This timber is used for agricultural implements, for furniture, and for carriages. Its cultivation must be very profitable. The black walnut is valuable for its use in cabinet-work. The American chestnut is useful, both for its excellent timber and valuable fruit. The walnuts and the chestnut do not transplant well, and should, therefore, not be moved.

Cottonwood trees grow readily from cuttings, and are particularly suitable for wind-brakes and shelter for orchards. The ailanthus thrives well on hard and stony soils. Its wood is well fitted for cabinet-work. The hard, or sugar maple, is valuable for its wood and saccharine juice. The box-elder grows more rapidly than the cottonwood, has a good quality of wood, and, lately, has engaged

public attention as a sugar-producing tree, giving promise of rivaling the sugar maple in producing saccharine juice. The white and red elms have a national reputation as ornamental trees; the red elm is much used in the manufacture of carriages. The white willow is useful mainly as a wind-brake. The Scotch, white, and Austrian pines are the best for general cultivation. The Scotch pine is especially adapted to general culture. The Norway spruce is very suitable for belts for the protection of orchards. The white and black spruces are especially valuable as ornamental trees; the hemlock should also come under this head, as it is one of the most beautiful evergreens. The beauty of the hemlock is not known; if it were, this tree would become a general favorite.

The cultivation of timber trees in this country will be very remunerative, and must, ere long receive due attention. In Hanover

there are 900,000 acres of wood under State management. One-fourth of the area of Prussia is in forest, one-half of which is in private hands. The forest administration in Thuringia, and the district of the Hartz Mountains, is most perfect and the best in the world. The duties are imposed, in districts, on a carefully organized body of officers, controlled and directed by a forest director. Our people should be incited to preserve the natural forests and cultivate artificial. It is maintained that, in order to accomplish this, the elements of forest culture should be taught in our common schools.

Evergreens will enhance the value and beautify the land; planted in our yards, they show taste, refinement, and progress. Where home-surroundings have beauty, there we find contentment, industry, and happiness — there we behold the beautiful and the symmetrical; our feelings are refined and our lives made happier.

SOURCES OF OUR ENGLISH.*

THOUGH in the past our colleges and high-schools have made the study of ancient languages a specialty, and considered proficiency in them as a test of scholarship, this excessive devotion to the writings of a "day that is dead" is now passing away, and increased attention is given to the study of the English tongue. All ordinary scholars are aware that our language is the offspring of the union and interunion of many distinct tribes and races, and that from every ancestor it has taken some noble and grand qualities, as well as some troublesome and teasing peculiarities. We can not catch up by the simple hearing of the ear all the richness, flavor, quaintness, or force of the words we daily use; it is necessary to learn their family history, native, home, and foreign travels before we gain the power over them that comes from long acquaintance.

Three-fourths of our language is Anglo-Saxon in its origin, yet a very small proportion of students pay any attention to learning this element of their mother-tongue; probably not one in a hundred of the common or even of the grammar-school teachers throughout our country's length and breadth ever purchased or studied even an elementary work upon Anglo-Saxon. The "Hand-book of Anglo-Saxon De-

rivatives" is exactly fitted to give young students a good knowledge of words in common use, and such a taste of the habits, dress, and manners of these quaint peoples, as will incite them to pursue the subject in more advanced works; it can be taken up and taught by any intelligent person without previous study of the subject; hence we heartily recommend the book as an introduction to that element which "forms the root, life, and beauty of the English tongue."

Older students, desirous of more than a speaking acquaintance with their native language, would find themselves richly repaid by the earnest perusal and diligent conning of "Marsh's Origin and History of the English Language." This work takes up the subject from the reign of Henry III., and, extending its researches to Elizabeth's era,* embraces a period of about four hundred years. The author says, "The history of this philological and intellectual progress is the too vast theme of the present course; and if I shall succeed in conveying a general notion of the gradual living processes by which the English tongue and its literature grew up, from the impotent utterance and feeble conceptions of the thirteenth century to the divine power of expression displayed in Tyndale's version of the New Testament in the sixteenth, and the revelation of man's moral nature in the dramas of Shak-

* "Hand-book of Anglo-Saxon Derivatives," Appleton & Co., New York; "Origin and History of the English Language," Scribner & Co.

speare at the commencement of the seventeenth, I shall have accomplished the task I have undertaken."

By copious extracts from early writings, including the "Chronicles of Layamon," "The Ormulum," "The Vision of Piers Plowman," and early translations of the Bible, the great changes through which our vernacular has passed are amply shown.

Speaking of translations, Marsh remarks, "Notwithstanding all that has been said, by Johnson and others, upon the influence of translation in corrupting language, I believe there is no one source of improvement to which English is so indebted as to the versions of classical authors which were executed between the middle of the sixteenth century and the death of Elizabeth. English, though much enriched, was still wanting in copiousness, and there existed no such acquaintance with Anglo-Saxon that any of its defects could be supplied from that source. Hence, Latin and French were the only fountains from which scholars could draw, and translations from these languages not only introduced new words, but, what was scarcely less important, new combinations of words for expressing complex ideas. The

variety of subjects discussed, and of styles employed by the classical writers, obliged the translators, not only to borrow or to coin new words, where no native terms existed for the expression of the thoughts they sought to render, but to seek in English literature, new and old, in popular speech, and everywhere, domestic equivalents for a vast multitude of words whose places could not be supplied by Latin terms, because these would have been unintelligible. Hence these translations did not merely enrich the language by an infusion of new philological elements, but they gathered up, recorded, and thus preserved for future study and use, the whole extent of the vocabulary then known to the English nation."

This quotation is a good specimen of the style of the work, and the subject is discussed thoroughly and still as concisely as consistent with clearness and breadth of treatment. The lingual facts and literary illustrations necessarily employed in such a treatise are drawn from sources not accessible to scholars living away from the great literary centers. Whoever, therefore, wishes to know the history of the English language, will do well to study it with Marsh.

AMELIA V. PETIT.

FREE RELIGION IN AMERICA.

WHICH WILL PREVAIL—JUDAISM, ROMANISM, OR PROTESTANTISM?

AFTER the Evangelical Alliance, came a Conference of Free Religionists in New York. In this was discussed various questions, from the most radical points of view. Here is a specimen at the opening, by the Rev. O. B. Frothingham, on "The Outlook of Religion in America." In the course of this address he said:

Religion is the great question of the day in all countries. The religious aspect of the question invades all social topics. What is the religious outlook in the United States? There is a little Fetichism here; there is Braminism, and there is Buddhism, too. These have, however, no future. There is one of the Old World religions that has entitled it to something like respect, and which exists in the greatest city in the New World, the peer in outward demonstration, at least, of its favored child. This is the old faith of Moses—the faith of the Hebrews. Has Judaism a great future in America? That it will not die soon is a matter of course. Judaism does not try to make converts. It stands on its dignity. It has a future,

but it is in the departing more and more from the old faith. It is becoming more and more theistic. The mission of the Hebrew faith will be in the New World to present the most perfect theism the world has ever seen. The day will come. It is at hand. We can not say that Judaism will be the future religion for America. In scope it narrows itself down to Christianity. Let the audience, then, look at Christianity as it is made up in

THE DIFFERENT SECTS.

The figures of the last census give the number of professors of each faith as far as they can be obtained under such circumstances. They are as follows: Methodists, 6,500,000; Baptists, 4,500,000; Presbyterians, 2,500,000; Roman Catholics, 1,990,514; Congregationalists, 1,117,000; Protestant Episcopalians, 991,000; Lutherans, 970,000; Reformed Church, 431,700; Reformed Dutch, 227,000; Universalists, 210,840; Unitarians, 155,471; Mormons, 87,838. There is a total population of these sects of 21,665,062, and the population of the country is 38,558,371. Now, every one of

these sects, with probably the exception of the Methodists, would quarrel with these figures. Romanists would say that they have 5,000,000, or perhaps 10,000,000. A broad distinction is always made as to these figures, and it is likely that, as far as Romanism is concerned, these figures are correct, because as far as the professors of that faith are concerned, they are very difficult to number.

IS ROMAN CATHOLICISM

to be the religion of America? Is Romanism to have the charge? It is very strong; it is increasing in strength; its numbers are far greater than in the census. The churches are numerous and costly; the congregations are very large. The priests are learned and very often devout men; and, in many respects, very noble and very exemplary men. Its services are attractive, and appeals very largely to the imagination. It promises to tired men a rest and a freedom from doubt. Its organization is absolutely perfect, the result of 2,000 years of continuous study and careful practice. Why, then, should Romanism not be the religion of America? Is it a religion inconsistent with republican institutions? Not as a religion. If we could pick our Catholics, then the Catholic religion would be eminently fitted for a republic. What better Catholic need there be than Father Hyacinthe? Why, then, should Romanism not be the religion of this country? This is the reason: Rome had the supreme power and lost it. Rome and Christianity were synonymous terms. She had it all. No power has ever yet had supreme power and lost it and regained its hold. Romanism, too, is an empire—it is a state of dominion. The chief priest is not only a king, but he is

THE KING OF KINGS.

Its cardinals are princes; its officers are diplomats; it unlocks Cabinets; it has a political policy of its own; it has political ends in view; and, being an empire, it can not exist in a republic. It claims, too, an authority over the conscience, and this is opposed to republicanism. What right have we to assume that we are to have a republic always in America? What right have we to assume anything else? The jealousy of Cæsarism; the determination of the workingmen to come forward—this, with other guarantees, are certainties for the republican form of government. Another reason: The country has just come out of a war that we have spent millions of money and thousands of lives in. For what? Simply that there may be no separation between North

and South? No, but because republican institutions were to be kept and preserved in North and South. There is one more reason why Romanism can not be the religion of America. Catholicism is the religion of the Latin race; it is the religion of Ireland; it is the religion of the Celtic race, wherever that race is found; it is the religion of no other. Think of England at the knees of the Pope! It is not the religion of the Anglo-Saxon race. The German race, which has just subdued the Latin race, is not Catholic. There would scarcely be a Catholic church in America but for the Irish on the one side, and the Mexicans on the other.

ARE THE IRISH TO RULE

on this Continent? Are the Mexicans? Not yet. For these reasons Catholicism is not to be the religion of America. Is it likely that either of these Protestant sects will absorb the rest? The Methodists think so. Protestantism needs all the sects, and more. They represent every shade of thought. Human nature is a harp of a thousand strings. What does this Evangelical Alliance mean? Is it not to place it as a compact and marked body? The Alliance has been at work twenty-seven years, and, after all, it is only an Evangelical Alliance. One-half the sects are left out. [Unitarians, Universalists, Swedenborgians, Quakers, Shakers, Mormons, Perfectionists, Roman Catholics, Jews, and others.] It is only a union of the narrowest and straightest of sects against Romanism on the one side, and infidelity on the other. To include all Protestants they must give up their theology. Where, then, are we in the religion of the future?

OUTSIDE OF ROMANISM,

outside Protestantism, there is a large, confused, but earnest religious power. First, there are the Spiritualists [said to be some millions]; second, there is literature; third, there is science. Mr. Frothingham explained at length the effect of these three departments of human effort. What are we to say of the religious outlook of America? In the first place, it is neither to be Roman Catholic nor Protestant, nor technically Christian. In the next it will be democratic. In the next it must be sectarian. In the next it must be practical. By that he did not mean a power that was to patronize the world. Religion is to be identified with society and its social welfare. Religion is to be social science. Religion is to be social and political reform. As religion is to be the aspiration of the individual, so religion is to be the aspiration of society. One thing more—the religion of America is to be free.

It is not to be Jewish, Mohammedan, or Christian; it is not to bear any particular name; that it is to be human, a religion of humanity. It is to be a

CONSECRATION OF THE HUMAN MIND to its great uses. I believe in religion more and more. I think the past has but shown us religion in its infancy.

[If we should ask Brigham Young what is to be the future religion of America, can there be any doubt as to his answer? He would say Mormon, or "Latter-Day Saints of Jesus Christ." The Shakers see "evidences" in Spiritualism, and in the increasing number of divorces, etc., that we shall, sooner or later,

drift into celibacy, and wind up human existence on this planet in Shakerism. So of each of the sects. All are working with great zeal, if not with good judgment, to bring the world to *their* views, into their fold, and into their heaven.

Looking at man from a phrenological standpoint, *we* see him rising from his present sensualism into a higher mentality, and culminating in the perfect man God intended him to be. Buddhism, Mohammedanism, Judaism, Romanism, Protestantism will have their day, and man will outgrow his sectarian creed. Whether he can ever outgrow Christianity, is a question which no man of this generation can decide.]

THE GOOD, TRUE, AND BEAUTIFUL.

AS in the physical world there is the correlation of the forces Heat, Light and Electricity, so in the spiritual world there is a kind of correlation of the three great spiritual forces, the Good, the True and the Beautiful. The soul, in seeking for the working of these forces in itself, that it may thereby obtain results either good, or true, or beautiful, and in seeking to bring the manifestations of these forces under its observation, can not pursue one to the exclusion of the other. Let it start on its pursuit of the Good, holding that as the great object to be obtained. The first step is to place itself in right relations to God—the great fountain of the Good. Certain duties attend these relations, the duties of the Christian life, embraced in the commands of love to God and to man.

If the soul love God it must endeavor to keep all His commandments. In order to do this it must have cognizance of them. If it love man it should know its duty to him that it may perform it. It is compelled to pursue the True in this direction of religion; it is compelled to reach after the "beauty of holiness."

The word of inspiration says: "*Whatever* things are *true*, *whatsoever* things honest, *whatsoever* things just, *whatsoever* things pure, *whatsoever* things lovely, *whatsoever* things of good report, if any virtue and if any praise, think on these things." Hence it is the Christian's duty, so far as lies in his

power, to pursue truth of every kind, the beautiful of every kind—truth in science as well as in religion; the beautiful in nature and art as well as the "beauty of holiness."

Let the soul make the True the great object of its pursuit. The more numerous the phenomena observed, the greater will be the facilities afforded to the pursuit.

The soul is bound by the laws of its own reason to accept one class of facts as much as another; the truths of the spiritual as much as those of the material universe.

Evidence of any kind, furnished by phenomena within reach of its observation, it can reject only by doing violence to reason, or through some incompetency of itself. Some phenomena of the Good take place within the soul itself, and can not be so well observed and understood if not experienced by the observer, as otherwise it could be. Hence a man can not be a perfect scientist without being a Christian—without pursuing the Good. Nor can he be successful as a scientist in obtaining truths which relate to the Beautiful without pursuing the Beautiful.

Let the Beautiful be the object of pursuit. What numberless beauties cluster around truths both in the material and spiritual worlds. Ah! the soul must pursue the True if it would reach the Beautiful. There is no higher beauty than the "beauty of holiness." It must pursue the Good. No artist is fully prepared for his work unless his soul is illumined by the Divine presence. Without

this, numberless beauties will be forever hidden from his gaze. There is no perfect esthetical culture without the pursuit of the Good and the True!

Ah! if each individual soul were reaching out constantly and simultaneously for the

Good, the True, and the Beautiful, how soon would begin to result harmonious development of all the faculties; how soon, in spite of the Prince of Darkness, the deserts in human life would rejoice and blossom as the rose!

EMMA M. BELL.

AGRICULTURAL HINTS.

PEAT AS FUEL.—The threatening failure of the coal supply in England has quickened the interest of investigators in the production of an artificial fuel which shall at least avert so great a calamity as the exhaustion of the mines until an indefinite period in the far future. Some enterprising spirits have been experimenting with peat, or turf, and it is reported from London that a company is being organized in that city for the purpose of working the extensive peat fields recently discovered in the Highlands. If the experiment should prove a success, it will doubtless lead to numerous similar organizations all over Great Britain, and especially Ireland, where immense fields of this combustible are known to exist, and for centuries past have been the main resources for fuel to the poorer classes. The company alluded to intend to use what is called the Clayton process of preparation, the main feature of which consists in thoroughly breaking up the fiber of the peat and converting it into a pulp. This, when dried in the sun or by artificial heat, becomes a solid mass and as hard as bituminous coal. For heating purposes this conglomerated peat has been already tested, and found to be fully equal, if not superior, to coal, while for some manufacturing purposes, such as iron smelting, it is preferable, owing to the absence of sulphur and phosphorus. In illuminating qualities it is also superior to bituminous coal. It makes a clear, cheerful fire in the open English grate, and is free from smoke and offensive odors, which are the chief objections to coal for domestic purposes. The experiment is a very important one in the present critical condition of the English coal market. The peat resources of Scotland and Ireland are almost equal in point of area to the coal fields of Great Britain, and if they can be utilized with profit, there will be no fear of a decadence of England's industrial greatness and progress for centuries to come. For Ireland especially the success of the experiment would

open up a new era of prosperity, and make her the center of the vast manufacturing enterprises of Great Britain.

In this country there exist extensive beds of peat, which may be converted into such really desirable fuel, and made to contribute to the comfort of all classes, to say nothing of its cheapening effect on the price of coal.

TO CLEAN PAINT.—A correspondent of the *Country Gentleman* says: Use but little water at once; keep it warm and clean by changing it often. A flannel cloth takes off fly specks better than cotton. Soap will remove the paint; so use but little of it. Cold tea is the best liquid for cleaning varnished paint, window-panes, and mirrors. A sharp piece of soft wood is indispensable for cleaning out corners. A saucer of sifted ashes should always be at hand to clean unvarnished paint that has become badly smoked; it is better than soap. Never put soap upon glass, unless it can be thoroughly rinsed off, which can never be done to window glass. Wash off the specks with warm tea, and rub the panes dry; then make a paste of whiting and water, and put a little in the center of each pane. Take a dry cloth and rub it all over the glass, and then rub it off with a chamois skin or flannel, and your windows will shine like crystal.

VALUABLE SHORT-HORN COWS.—Of course our agricultural readers have all heard of the wonderful sale of choice cattle which took place last fall at the New York Mills, near Utica, N. Y. The cattle were sold at auction, and prices were realized which tax our credulity when we appreciate their vastness. One hundred and eleven animals were offered for competition among the buyers, many of whom were from England, and the aggregate of the sales exceeded \$380,000.

The breeds which brought the largest sums were those known as Duchesses and Oxfords,

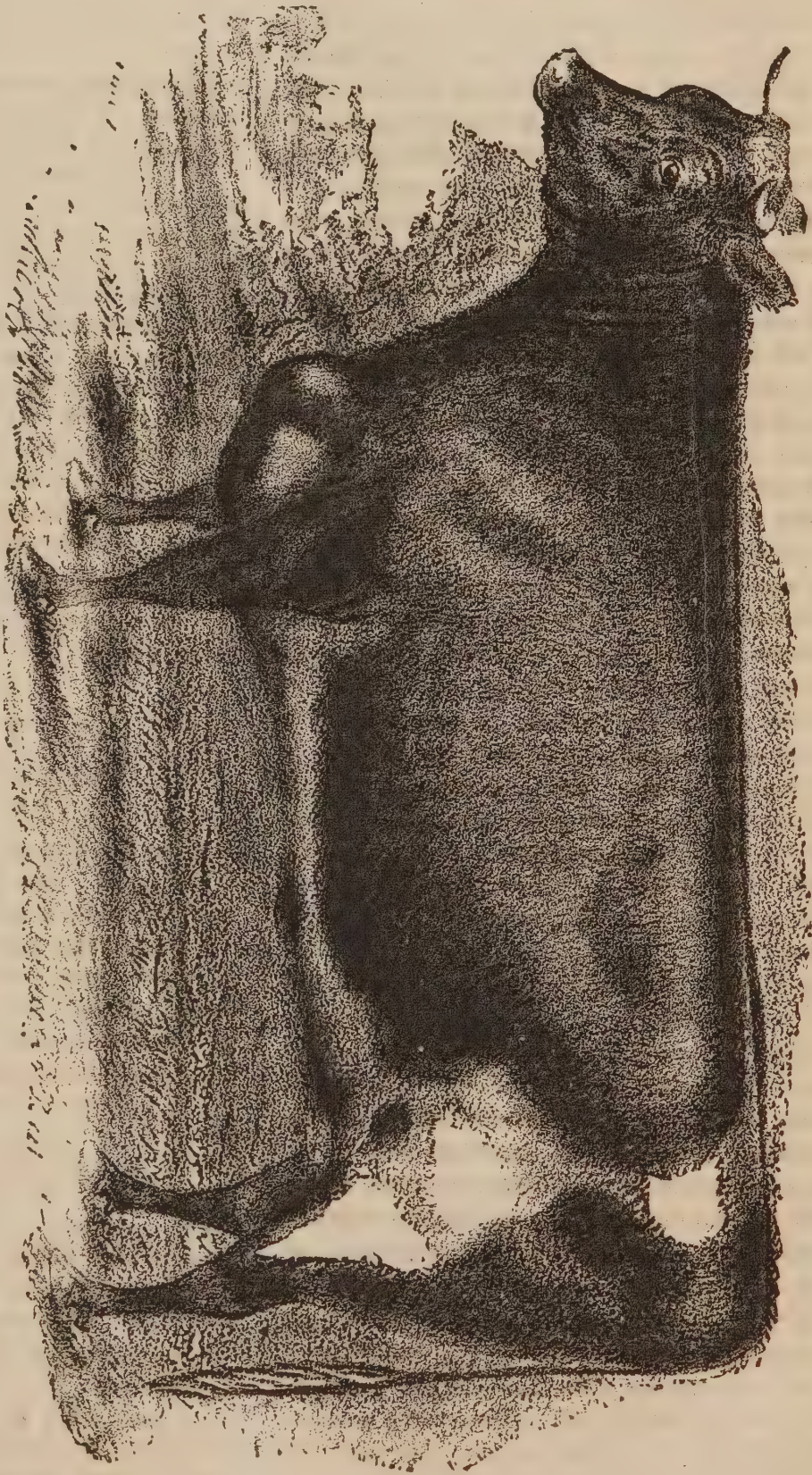
and the first sold, known as the 2d Duke of Oneida, a three-year-old bull, brought \$12,000. The cow represented in our engraving, known as 1st Duchess of Oneida, was next offered, and, after an extraordinarily exciting contest,

by Mr. R. Pavin Davis, of Gloucestershire, England, for the unprecedented sum of \$40,600.

The Duchess stock was imported from England in 1853, and kept in a state of perfect purity in Dutchess County by the importer.

[What a symmetrical figure! How perfect the proportions! What neat and handsome limbs! How straight and perfect the form! What a countenance! That is a handsome physiognomy! Observe the eye—how expressive and intelligent! so docile, gentle, and almost dainty. Who could treat such a creature unkindly? Our object in introducing this illustration is simply to show the effects of high culture. We see the same in horses and in all domestic animals. We see it in fruits, flowers, grain, and grasses. Why not in the human race as well? Should not all children be improvements on their progenitors? Would right living, temperate habits, and true godliness have anything to do with a better condition of things?]

\$30,600 COW—FIRST DUCHESS OF ONEIDA.



was knocked down to Lord Skelmersdale, of England, for \$30,600. Subsequently other cattle of the same strain followed at \$19,000 and \$35,000, and the interest culminated with the sale of the 8th Duchess of Geneva, the dam of the animal in our engraving, which was bought

We infer from this experiment of Mr. Campbell, of the New York Mills, that stock-raising in this country "pays," although we could scarcely expect a \$40,000 cow to furnish milk enough to pay her way, as the interest alone on such a sum is five times as much as the re-

turn to her owner of the best milch cow we know. The short-horned, or Durham, breed is deemed the best.

A CONVENIENT WAY TO MEASURE LAND.—

It is frequently desirable to measure a given plot of ground or a portion of a field, and a simple method, such as the following, for which we are indebted to an exchange, will be of use to many of our readers. Surveyors are not always at a convenient distance to attend to such little jobs, and even when they do reside in the immediate vicinity, one does not always care to incur the expense incident to such a small job. If the lines are already established, the plot can be measured with sufficient accuracy for all practical purposes by means of a neat rod-pole, made as follows: Procure a stick of pine, whitewood, basswood, or almost any other timber, one and a half inches square and sixteen and a half feet long. Dress each end, tapering from the middle, so that the pole will be one and a half inches square at the middle and about half an inch square at each end. Such a pole will be light and quite stiff. Now graduate one side with the marks representing feet and inches, and graduate another side to indicate a surveyor's links. A pole one rod in length must be equal to twenty-five links. To divide one side correctly, let a mechanic's compass be adjusted, so that the points will divide the distance into twenty-five equal spaces or links. A line can be measured with such a pole nearly as accurately as with a surveyor's chain.

Now, then, if a person does not understand how to multiply chains and links, let him compute the measurement by square feet. In one acre there are 43,560 square feet. Any intelligent school-boy can measure the length and the breadth of a square plot, multiply one by the other, and divide the product by 43,560, which will give the number of acres, and the number of square feet representing the fraction of an acre. If it is desirable to measure a triangular plot, two sides of which lie at right angles, measure these two sides, multiply the distance in feet one by the other, and divide that product by two, which will indicate the number of square feet, by 43,560, and the quotient will represent the number of acres.

AN amateur farmer wonders "why on all this fair earth the ground is spread bottom side up, so that it must be turned over with a plow before crops can be raised."

WISDOM.

INDOLENCE is the rust of the mind, and the inlet of vice.

TEMPERANCE is corporal piety; it is the preservation of divine order in the body.—*T. Parker.*

HE who is learned and does not teach is like a myrtle in the desert.—*Ex.*

THERE is gambling in our households and personal expenses, as unjustifiable as in our business ventures. It is gambling to live at a high rate, trusting to luck to meet the bills.

LIFE is a stream which continually flows on, but never returns. We die daily; for each day takes away some portion of life. The days which are past are gone forever; the present moment only is our own.

NEVER put much confidence in such as put no confidence in others. A man prone to suspect evil is mostly looking in his neighbor for what he sees in himself. As to the pure all things are pure, even so to the impure, all things are impure.

THERE is no outward sign of politeness which has not a deep, moral reason. The education teaches both the sign and the reason. Behavior is a mirror in which every one shows his own image. There is a politeness of the heart akin to love, from which springs the easiest politeness of outward behavior.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

A YOUNG husband handed his wife a dozen buttons, the other day, and asked her to put a shirt to them. The brute!

A YOUNG man who had just returned from a sequestered village to the city, declared that it was so still at night in the country tavern where he lodged, that he could hear a bed tick.

A STANDING heading in one of the Chicago papers is "Errors Corrected." The following is a sample of the paragraphs it covers: "Lord Lyon is the best *host* in Paris, and not the best *shot*."

"OWING to the peculiar arrangement of the programme, no piece can be repeated," was the answer Mr. White received from his landlady (with whom he boarded) upon asking for a second piece of pie at dinner.

"HAS the cookery-book any pictures?" asked a young lady of a bookseller. "Not one," replied the dealer in books. "Why," exclaimed the pretty miss, "what is the use of telling us how to make a good dinner, if they don't give us no plates?"

A PHILADELPHIA paper of a recent date furnishes the startling information that "Aurius Manlius Severinus Boethius," a celebrated Latin philosopher, was beheaded by King Theodoric thirteen hundred and forty-eight years ago.

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH *that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.*

QUESTIONS OF "GENERAL INTEREST" ONLY *will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.*

IMITATION—MORAL SENTIMENTS.—In Combe's "Constitution of Man" Imitation is classed or grouped with the moral sentiments. Is this a mistake, or am I wrong in believing that parrots, monkeys, etc., possess the same faculty?

Ans. Classification, as such, is of no great consequence any way. The stomach, the liver, the heart, the lungs perform special functions, and they have been, so far as relates to temperament and constitution, differently classified by different men. But they have still gone on doing their own special work. If one were to say that hearing was not one of the special senses, and ought not to be classified with tasting, smelling, seeing, and feeling, it would not change the nature of the faculty or function. You have as good a right to classify as Combe had. Imitation is sometimes called aptitude, or a tendency to learn and conform in respect to what others do. Some claim that the lower animals reason; some deny that the reasoning organs belong to the lower animals, and claim that Causality and Comparison are strictly human faculties, denied to the lower animals. So far as we can judge, the mental organs and faculties are more or less classified by nature, the intellectual being in a group, the social in another group, those that are strictly selfish in another, those that are aspiring in another, those that are moral in another, those that relate to the esthetical and beautiful in another group. Firmness is required in moral things as much as in physical. Imitation may work in both directions, toward the physical and toward the moral. For the most part, we think the lower animals act by a kind of instinctive fatalism, while the human being copies, accepts instruction, does what he sees done. Though his original mentality will modify his conduct, the infant son of the most cultured and refined, if put into the wigwam of the Indian, will imitate Indian

life, and be proud of excelling in its rude sports; but his superior inheritance of intelligence would make him superior to all the Indians in respect to comprehending surrounding phenomena. If the Indian child could be put into a cultivated family, he would take on the ways and usages of civilized society, but he would not be so apt in reasoning, in refinement, and moral sentiment as his associates, and he would be more fierce and unrelenting, because his savage inheritance would have given him a larger base of brain and less top-head. Yet he would seek to imitate the refinement of civilization, as the white child would the grotesque rudeness of savage life.

The parrot imitates voice, the monkey action, and blindly imitates hundreds of things without any sense of the fitness or meaning of that which he imitates. Imitation is more common to the human being, but it is not an exclusively human quality, and not a moral sentiment.

A TURNCOAT.—During the lively discussion recently awakened by the nomination of a certain distinguished gentleman for the office of Chief Justice of the U. S. Supreme Court, we frequently heard it said that in political matters he was a "turncoat." Will you enlighten a reader as to the source of this term?

Ans. This word originated on the continent of Europe, and, according to some writers of history, is due to the conduct of one of the first Dukes of Savoy, who, having dominions lying open to the incursions of the two contending houses of Spain and France, was obliged to temporize and fall in with that power that was most likely to distress him, according to the success of their arms against one another. So, being frequently obliged to change sides, he humorously got a coat made that was blue on one side and white on the other, and might be indifferently worn either side out. While on the Spanish interest he wore the blue side out, and the white side was the badge for the French. From hence he was called Emmanuel, surnamed the Turncoat, by way of distinguishing him from other princes of the same name of that house.

NEWSPAPERS IN THE UNITED STATES.—When, where, and by whom was the first newspaper printed in the U. S., and what was its circulation the first year? and how many copies could they print?

Ans. The first newspaper published in the United States appeared in Boston on the 25th of Sept., 1690. But one number or edition of this undertaking on the part of Richard Pierce and Benjamin Harris appears to have been issued, as the authori-

ties declared it contrary to law, and probably suppressed it. The *Boston News Letter*, which appeared April 24, 1704, was a successful effort, and continued to be issued until 1776. As the printing was then done by hand on a press which seems ridiculously small and primitive compared with the grand steam-operated machines of to-day, the number of copies made per hour was necessarily few. The circulation of the *News Letter* probably did not any time exceed 3,000.

According to the census of 1870, the value of the printing paper manufactured for that year was about \$25,200,000, weight not stated; while the returns of printing paper, wrapping paper, writing paper, and paper-hangings aggregated \$50,842,000.

TESTIMONIALS.—I am often asked, "What do great men think of Phrenology?" Does Mr. So-and-so believe in it? Is it a recognized science? Is it taught in any of our universities? In a lecture to his class one of our professors said that "the externals of the skull did not harmonize with the internal; that the size of head did not indicate the size of brain; that one may lose a part of the brain and not impair the mind." Now, what I wish to know is this: 1. What great men think of it? and, 2. Whether you can prove the correctness of your claims? 3. If true, does it not lead to fatality, and make man to be irresponsible for his acts?

Ans. Our correspondent shall have answers to all his questions. Indeed, the same or similar questions come to us from other readers, and we are collecting such "testimonials" as have been given on the subject from time to time; and we will thank those who are willing to do so to give us in brief what they know on the subject, and also to state of what use Phrenology has been to them. There are teachers, preachers, editors, authors, lawyers, judges, employers, keepers of insane asylums, prisons, etc., who have had more or less experience as to the **UTILITY** of Phrenology, and we shall be glad to hear from such, that we may add their testimony to that already in hand. These testimonials will appear in the **PHRENOLOGICAL JOURNAL** from time to time, and ultimately in a collected form. Reader, what has Phrenology done for you?

DIFFIDENCE—I have a boy who is so much afraid of ridicule that he dislikes to wear his overcoat to school, even in cold weather, because he is afraid the boys will laugh at him for being babyish. When spoken to by strangers, he will not respond if any other person is present. What is the cause of this, and what the proper treatment?

Ans. The boy probably has an excess of **Approbativeness** and **Cautiousness**, and not enough **Self-Esteem** and **Combateness**. He should be encouraged to do right and rise above unjust criticism. Such children are very apt to be scolded and ridiculed at home for their timid foolishness, and such treatment only serves to make the matter worse. He should have the subject explained to him, and be induced to do that which is proper because it is so, and not care for the criticism of

those who laugh at him for that which is right. Thus his judgment, conscience, and courage will be awakened, and his sensitiveness and timidity modified, if not wholly suppressed.

CHESSE AND CHECKERS.—What organs are required to qualify a person to become expert in these games?

Ans. One should have large **Individuality**, to give quick and particular observation; **Form**, to remember the changes which several moves would make; **Order**, to give system and method; **Locality**, to remember positions, real and relative; **Constructiveness**, to give appreciation of combinations; **Calculation**, or the sense of numbers; **Comparison**, to recognize adaptation and discrepancy; and **Causality**, to see ahead and calculate consequences; **Firmness** and **Continuity**, to give patience; and small **Acquisitiveness**, to be willing to waste time and not feel the loss.

A RETREATING FOREHEAD.—My forehead is slightly retreating; in what way can I fill it out or make it bulge out at the top part?

Ans. It is not certain that it is necessary to have the forehead fuller at the top. It may be that its sloping depends upon the extra large development at the base, across the brow. Large perceptive organs frequently make the forehead seem retreating. But the way to increase the upper part is to read books on philosophy and logic, and thereby exercise the organs of **Causality** and **Comparison**.

Other questions, deferred for want of space, will be answered in our next.

What They Say.

YORK, PA. DEC. 27, 1873—**EDITOR OF JOURNAL**—*Dear Sir:* Perhaps the readers of the **JOURNAL** will remember that shortly after the murder of the Deering family at Philadelphia, the Squibb family of York County, Pa., was murdered in a very brutal manner. An Irishman, named Donovan, living near Squibb, was suspected, arrested, tried, found guilty, and hung. The evidence was circumstantial, and so strong that it is generally believed that when Donovan stood on the gallows the right man was in the right place (claiming hanging to be wrong at the same time). I did not see Donovan, but a few months after his execution his photograph (not a first-rate one) was shown to me, and my opinion of Donovan's character called for. I did not know it was Donovan's likeness, but I then gave a description of the man. The photograph showed him to be a rough character, quite devoid of refinement or culture. I was deeply impressed with his very large **Destructiveness**, **Combateness**, and small **Conscientiousness** and **Benevolence**. His intellect was deficient, and the animal brain predominated. He was just

such a character as we often find with surroundings favorable to crime. Hygiene, education, and friendly aid from youth would have made him at least a law-abiding citizen. The money expended for the coroner's jury, trial, and execution, if it had been used in a sensible way for his education or enlightenment, would have saved the Squibb family and their destroyer from violent deaths, and the public from all the evil that resulted.

Yours, respectfully, E. J. CHALFANT.

SUSPECTED DISHONESTY.—One "Dr." J. D. Warner, advertised as "of New York University," has been lecturing in this region the present winter upon important topics connected with health and physiology. He is a rather fine-looking man, a good speaker, has a large anatomical cabinet, numerous mammoth paintings, and his lectures have been well attended and generally useful. Last Saturday evening his topic was the brain. I was not able to attend. His bill had these sentences: "The brain the seat of intelligence and all mental action. Intelligence proportionate to the quantity and quality of brain matter; illustrated by the brains of great men, idiots, and the lower animals." He was also to treat of the four temperaments, bilious, sanguine, lymphatic, nervous—distinctions first made by phrenologists. Judge of my surprise when I was told that, on said evening, the learned lecturer assailed Phrenology, asserted that nothing could be told by it, etc., basing all his objections upon the false assumption that phrenologists look for "bumps," protuberances. Now, a query arises in my mind as to the honesty of the speaker in the making of the aspersions he did. How could so intelligent a man err so fundamentally? Did he yield to temptation, judging that a hit at phrenological science might increase his popularity, add to the sale of his catarrh syringes, and swell his profits every way? I will not say, I only wonder.

NORTHERN BERKSHIRE.

[Having no knowledge of this fellow, who hails from what is evidently a one-horse quack medicine concern, it is reasonable to infer that he is of no consequence. So let him peddle his traps.]

VITAL FORCE, MIND, AND SOUL.—These subjects have been spoken of quite familiarly in the pulpit and by moralists and metaphysicians from time immemorial almost. All explanations, conjectures, and speculations on these subjects heretofore have been unsatisfactory, and sometimes, apparently, extremely absurd. The transmigration idea of ancient Greece was a good conception, but the application of the material life force to other bodies of different genera after a dissolution of the original was, it seems, the great mistake. It is better, perhaps, than the Huxley idea.

As a matter of variety on these subjects, let us analogize a little and see if this mode of illustration may not be more satisfactory than the meta-

physical mode heretofore adopted, although it is by no means claimed to be conclusive. It is a fact that matter exists, and is controlled, according to universal belief, by real material forces. Electricity, gravitation, and some others are these forces. No one denies that such forces exist and are really material. Down to a comparatively recent period there were but a few simple elements known, but no one denied these except some extreme metaphysicians. Now there are known to be about sixty-three of these elements. Man has been more successful in his examinations of ponderable matter than he has been in that of the imponderable; yet as he has made some progress in the latter, there seems no reason why he shall not add to their list. The vital force seems as clear and visible as that of the gravitating. The last every one believes in since the days of Newton, for, they say, the effects are visible. The effects of the vital forces are equally visible in the movements of man and animals and vegetables, and there must be as many separate acting forces as there are genera of these. It is said in Scripture that the vital energy is breath, and it seems to me this amounts to the same thing. It must be material, as the effects are as visible as are those of gravity. Now, the phenomena of vital energy are called mind and soul, and are considered immaterial. The mind can not conceive thought to be material. But animals are said to have mind—and this is true—but no soul, and this is also true. What, then, is soul as distinguished from mind? Now we have arrived at a point where the matter seems clear, by comparing or examining the difference, and showing the deficiency in some respects of animals as compared with man. We have to do this on the phrenological basis, which is the only practicable mode.

It is commonly thought and taught that animals have many organs and faculties common to man, and this is true; but these faculties of animals, by reason of inferior structure of organs, are not equal in power, particularly those of the intellectual, to those of man; nevertheless, it is immaterial mind. Now, observation leads to the correct conclusion, and Phrenology proves it, that animals are not endowed with these higher and nobler organs and faculties which lead to God, called Veneration, Hope, Wonder, and Conscientiousness. Through these the soul is esthetic, and its energy is always in accordance with the power and energy of these, particularly that of Conscientiousness. It is a common observation that the soul in inferior races and individuals is small. This is strictly true. We have hopes in the future in another sphere that these earthly organs may become so refined that the soul will be brilliant in proportion to this refinement. Let us cultivate our higher powers, as in proportion to this will be the brightness of the soul and our corresponding happiness in this life and in that to come.

M. N. ABBEY, M.D.

YOUR OLD HEAD.—I like old things, old faces, and old heads. So it comes that I am very much overjoyed at the sight of your old head on the cover of the JOURNAL. I remember of standing on tip-toe to look at the first number that was ever published, and thought that if people could really see what was under my hair, maybe it would pay to be good. So, you see, I'm one of your children (excuse me, Phrenology's I mean), and have been under your teachings ever since I can remember. You have brought me up, fed, and educated me, given me a freedom suit, and now I am paddling my own canoe, according to directions. If my ship comes in from sea laden, then your teachings have not been in vain. Certain it is I have picked up treasures when the waves have rolled high—in mid-ocean when the sea was calm in my voyage of life. May I leave an impress of good when my bark shall have touched the "other shore."

LITTLE HOME BODY.

A COMPLIMENT FROM TEXAS.—When renewing his subscription for the JOURNAL V. W. H. says: The world owes you a debt of gratitude for telling them how ignorant the inhabitants really are compared with what they might be, if they would only turn their eyes inward and meditate upon the "greatest study" of man. Will you continue to bless our countrymen by pouring the light into dark places? and, in doing so, among many other good things, teach the orthodox of former days to wake up and learn the primitive fact of the non-unity of the races, and the fact of the existence of Pre-Adamites. [This question has been discussed at some length in the JOURNAL in 1872. We may have more to say on the subject in future numbers.]

PRACTICAL REFORM. — *Dear Sir:* With pleasure and thanks I renew my subscription for your excellent JOURNAL. It has, within the short space of twelve months, converted your humble servant from a confirmed (almost) tobacco toper to a free and clean man, thereby securing for me improved health and an actual saving of at least \$25 per annum. I will be in attendance at our County Teachers' Institute next week, and will do what I can for the JOURNAL. J. L. B.
PRINCETON, MISSOURI.

IRISH WAKES.—During our recent visit to Ireland on a lecturing tour, we met, among the readers of our publications, one of the editors of the oldest newspaper in Belfast, who cordially welcomed us, through that journal, to the "Emerald Isle." Within a few months past this same Irish editor was as cordially welcomed by us to these shores. After spending a season here, he returned to his native Erin. We invited him to furnish us for publication a series of short pen pictures of IRISH LIFE AS IT IS, without other

conditions than that the sketches be true to life and done in the kindest spirit. Sketch No. 1, on "WAKES," was given in our January number; and here is what an Irishman, who hails from Nebraska, writes us on the subject:

"PEN AND INK PICTURES OF IRISH CUSTOMS."
—*Editor Phrenological Journal:* One of your contributors, in a series of papers under the above caption, undertakes, with some distorted facts and a good deal of malignant exaggeration, to burlesque the customs of Ireland, of which he is woefully ignorant, or which he is maliciously disposed to misrepresent. I do not think the PHRENOLOGICAL JOURNAL would willingly offend any class of its readers; but "Christy Crayon," in common with too many of our short-sighted, addle-pated bigots, think they are benefiting their Anglo-Saxon prejudices by vilifying the Irish in every light they can, drag them before readers as ignorant as themselves are intolerant. They select isolated cases to characterize a class. The article on "Irish Wakes" in your January number is base vilification. I defy your contributor to point out a single instance in which, at Irish Catholic obsequies, "a collection is raised for further masses for the repose of the soul of the departed." I can prove to him or you that more murders have been committed in the United States, progressive and pious as we are, in one week than in all the weddings, wakes, funerals, and fairs in Ireland in the last twenty years. I claim to know that much-slandered land as well as any one in America, and have no hesitancy in dubbing "Christy Crayon" a ———.

MAC DONAGH.

[We interpose to prevent hard words and epithets where they can do no good. But who else supposed any offense was intended by C. C.? We confess we saw no malice in it, nor did we suppose one Irishman, who is now past middle age, one who has spent most of his life in the land he loves as his life, and is there now, would say or do ought to hurt the feelings of a brother Irishman. But we now see how difficult it is to please all. Old Æsop was right.]

J. N. B., of Plainville, Conn., writes that he has learned of certain results in regard to the constitution of the brain, derived from the experiments of an eminent professor, which have a marked bearing upon the practice of drinking "intoxicating liquors." He states:

"By experiments the doctor found the brain to be formed of small cells, and in persons that drank intoxicating drinks the cells were enlarged beyond their natural size. He argues that when a man commences to drink these cells commence to enlarge, and continue to do so as long as he drinks; and should he leave off any time that the cells always remain enlarged—never go back to their normal size. And in this changed condition he finds a reason for the frequent relapse of men who have attempted to reform after a career of intemperance."

There may be much truth in this. At any rate, it has a serious character, which should admonish those disposed to dissipation or irregularity in their habits of drinking.

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

THE EDUCATION OF THE FEELINGS OR AFFECTIONS. By Charles Bray. Octavo; pp. 176. Third edition. Price, \$1.50. London: Longman, Green, Longman & Roberts; New York: S. R. Wells, 389 Broadway.

Mr. Bray is well known in England as a phrenologist and an author. His present work contains an analysis of the mental constitution of man; the education of each faculty considered separately.

THE SELF-PROTECTING FEELINGS—Appetite, Combativeness, Destructiveness, Secretiveness, Acquisitiveness, Constructiveness, Cautiousness, Love of Life.

THE SELF-REGARDING FEELINGS—Self-Esteem, Love of Approbation.

THE SOCIAL AFFECTIONS—Amativeness, Philoprogenitiveness, Adhesiveness.

THE MORAL FEELINGS—Conscientiousness and Benevolence.

THE ESTHETIC FEELINGS—Ideality.

THE RELIGIOUS FEELINGS—Veneration, Hope, Wonder.

FEELINGS which give concentration, power, or permanence to the others—Concentrativeness and Inhabitiveness, Firmness, Imitation, the feeling of the ludicrous.

AUTHORITY AND OBEDIENCE—Temper, punishment, manners, example.

The Connection of Mind with Organization; the Subjective and the Objective.

The Intellectual Faculties; Conclusion.

This work has passed through three editions in London, and has not been reprinted here. The copies now offered were imported, and will be sent to applicants by return post.

MECHANICS' LIEN LAWS, for New York City and the Counties of Kings and Queens. Statutes, Digest and Commentaries. With Numerous Forms. By R. S. Guernsey. 8vo.; pp. 238. Price, \$4. New York: Diessy & Co., 86 Nassau Street.

This work contains: Introduction and Statutes; Acquiring and Perfecting a Lien; Foreclosure of Liens; Relating to Kings and Queens Counties; Forms, Table of Cases, and Index. The *New York Daily Register* says: "Besides reported cases, the author has resorted to the records, in many instances, and made extracts and references thereto upon questions and points which have not been reported elsewhere, and in some cases he has inserted forms which have been approved by reported decisions, but which could only be found in the record of the case." * * * * *

From the *New York Daily (legal) Register* of

Dec. 8th, 1873: "This work appears to be very comprehensive, apart from the decisions and statutes. The preface says: 'The author has discussed or stated every question or the principles of it that has occurred to him, that has arisen or can arise which is exclusively confined to the nature of these statutes.' This of itself will make the work of great utility, being by a lawyer of extensive study and experience in that class of cases, and the comparisons of the proceedings and principles under these statutes with those at common law and in equity actions, render it of additional value." * * * * *

"The matter is very compact and well arranged, besides being clear, terse, and explicit."

SECRET SOCIETIES, Ancient and Modern.

An outline of their Rise, Progress, and Character with respect to the Christian Religion and Republican Government. Edited by General J. W. Phelps. One vol. 12mo; pp. 240; paper. Price, 50 cents. Chicago: Ezra A. Cook & Co.

Is this Democratic Republic doomed to destruction through secret societies? Is it to be overthrown by the Pope of Rome? Or, are the Methodists, the Mormons, or the Shakers to have temporal and spiritual dominion here? Many live in terror of one or the other of these terrible "powers," and fear we are soon to be swallowed up, wiped out, annihilated. To increase the scare, here comes General Phelps with his new book, which tells all about "The Antiquity of the Secret Societies; The Life of Julian; The Eleusinian Mysteries; The Origin of Masonry; Was Washington a Mason? Filmore's and Webster's Deference to Masonry; A Brief Outline of the Progress of Masonry in the United States; The Tammany Ring; The Credit Mobilier Ring; Masonic Benevolence; The Uses of Masonry; An Illustration; The Conclusion."

ANTI-TOBACCO JOURNAL. October, November, and December. Nos. 10, 11, and 12. Orders should be addressed to George Trask, Fitchburg, Mass.

Here are sermons, lectures, discourses, remonstrances, rebukes, admonitions, criticisms, ridicule, and appeals to one's moral sense—if not clean gone by the use of the narcotic—which ought to convict and convince every reasonable reader. Send a dollar to the publisher and ask for tobacco literature, and you will receive the worth of your money.

MY KALULU, Prince, King and Slave.

"A Story of Africa. By Henry M. Stanley, author of 'How I Found Livingstone.'" With Illustrations. One vol. 12mo; pp. 432; muslin. Price, \$2. New York: Scribner, Armstrong & Co.

Whatever may be thought or said of Mr. Stanley as a speaker, it can not be denied that he has become one of our best known newspaper correspondents; and a very racy writer he certainly is. The book "My Kalulu" will interest those who care to follow him into Africa among slave trad-

ers—where he now is—and to learn something of the dark doings among dark people. The work must prove popular. —

FANNIE ST. JOHN. *A Romantic Incident of the American Revolution.* By Emily Pierpont Delesdernier, author of "Hortense," "Headland Home," etc. One vol., small quarto; pp. 63; cloth. Price, \$1.50. New York: Hurd & Houghton.

The writing of Fannie St. John was principally "a labor of love," commemorating worthy persons—relatives to the author?—and the publishers put into it the best materials to make a very handsome book. As a *souvenir*, it will find a hearty welcome among friends and relatives.

THE CHILDHOOD OF THE WORLD; A Simple Account of Man in Early Times. By Edward Clodd, F.R.A.S. Second American Edition. One vol. 12mo; pp. 91; cloth. Price, 75 cents. New York: Asa K. Butts & Co.

In his preface the author says: "For the information of parents and others into whose hands this book may fall, it may be stated that it is an attempt, in the absence of any kindred elementary work, to narrate, in as simple language as the subject will permit, the story of man's progress from the unknown time of his early appearance upon the earth to the period from which writers of history ordinarily begin." —

THE PHOTOGRAPHER'S FRIEND. An illustrated Bi-Monthly Magazine, Devoted to the Photographic Art. Octavo. Terms, \$2 a year; single copies, 50 c. Baltimore: Richard Walz.

This magazine is illustrated by the most exquisite photographs we have ever seen. The work must be indispensable to photographers, and exceedingly interesting to all lovers of art.

LA CRÈME DE LA CRÈME. A Collection of Music for Advanced Players. Price, \$4 a year in advance, or 50 cents a number. New York: J. L. Peters.

No. 2 contains "The Zither Player," "La Caprera," "Slumber Song," "Schubert's Serenade," "In the Moonlight," "The Flash."

NEW BOOKS IN CALIFORNIA.—Among recent announcements, Messrs. Bancroft & Co., of San Francisco, make the following:

THE TEACHINGS OF THE AGES; A Religio-Philosophical \$3 work. By A. C. Traveler, whose name we have met in the *Overland Monthly*. The plan of the work is broad and comprehensive, embracing in its grand sweep of the ages the past, present, and future of humanity. In the treatment of the subject-matter the author is suggestive rather than argumentive, and introduces the reader to vast unexplored fields of thought. Among the various topics, old and new, of which "The Teachings of the Ages" discourses, and which are exciting unusual attention and interest in the United States at the present time, and indeed in every part of the enlightened world, are: The influence of the Church of Rome, regarded as a temporal or political power, upon our Republi-

can institutions; The principal sects of Christendom reviewed denominationally, with reference to the vital spirit of their religion; Woman, her position and status in the Church, in the Government, and in Society; Mormonism, its peculiar relations to the Hebrew and Christian Churches; The long exile of the Jews among the Heathen nations of the earth, presented in an original and striking light; and the wide-spread Spirit Phenomena of the age. —

THE FLORAL CABINET, and Pictorial Home Companion. Price, \$1.25 a year, or 12 cents a number. We have received from the publisher the January and February numbers of this beautiful and interesting paper. Each number contains a page of music, and is very profusely illustrated. Subscribers get a fine chromo of a bouquet of flowers in eleven different colors. Send for it and read it, and you will soon get the value of your money. Published at No. 5 Beekman Street, New York, by Henry T. Williams.

THE CARRIAGE MONTHLY, published by I. D. Ware, of Philadelphia, is worthy of the attention of all who are practically related to the business of which it is the recognized organ. The character of the illustrations and the make-up in general of the monthly command our admiration. As a publication in the interest of a special branch of industry, it is a model. Terms, \$3 a year.

FREE RELIGION.—Messrs. Asa K. Butts & Co., of New York, are the publishers of a series of pamphlets, by various authors, in the interest of a class known as Free Thinkers. Such, for example, as the works of Mr. Thomas Paine, etc. The following are their latest issues:

THE ESSENCE OF RELIGION. God the Image of Man; Man's Dependence upon Nature the last and only Source of Religion. Ludwig Fenerbach, author of "The Essence of Christianity," etc. Translated by Alexander Loos, A.M. 12mo; pp. 75; pamphlet. Price, 60 cents.

ESSAYS. By O. B. Frothingham, E. L. Youmans, James Parton, John Weiss, and others. Read at the Meeting of the Free Religious Association held in Cooper Union, October 14th, 15th, 16th, 1873, with the Debates Thereon. (Reported from the N. Y. *Tribune* Reports.) 12mo; pp. 89; pamphlet. Price, 35 cents.

A RELIGION OF INHUMANITY. A Criticism. By Frederick Harrison. 12mo; pp. 39; pamphlet. Price, 15 cents.

THE RELATION OF WITCHCRAFT TO RELIGION. By A. C. Lyall. 12mo; pp. 32; paper. Price, 15 cents.

PUBLIC LEDGER ALMANAC FOR 1874. Its fifth annual issue is presented to subscribers of the *Ledger* free of cost, designed as a household companion, and containing much useful information. Published by Geo. W. Childs, Philadelphia.

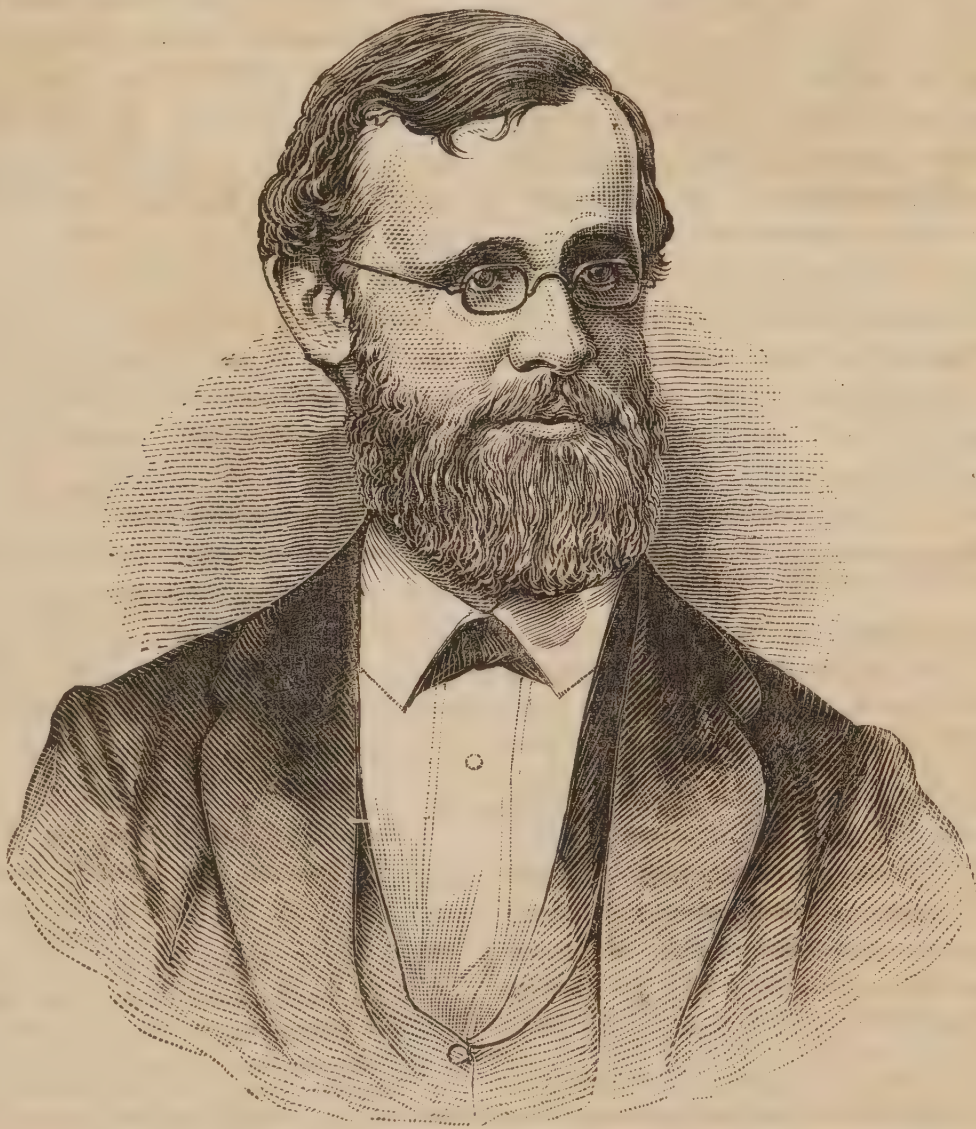
SHELDON'S WEEKLY DRY GOODS PRICE-LIST. Published by J. D. Sheldon & Co., New York. Terms, \$5 per annum; single copies, 25 cents. A convenient pocket-edition of a very useful publication for merchants.

THE
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[WHOLE No. 424.]



CLEVELAND ABBE,

THE METEOROLOGIST OF THE SIGNAL SERVICE, OR "PROBABILITIES."

THAT person to whom, in time past, we were wont indefinitely to allude by the title of "Clerk-of-the-weather" is no longer a myth, no longer a weak attempt at sarcasm on the part of one whom intolerable heat, or stiffening cold, or a reign of mud

and weeping skies had driven to desperate imaginings.

Within a few years daily reports of the state of the weather at different parts of the country, and predictions with regard to the changes that may be expected in this or that

section, have become a part of our every morning's news. That daily newspaper which has any title to the respect of the reading public has its special accommodation for the reports of the Signal Service Bureau, and every business man as he turns over his paper, while discussing his breakfast, glances down the columns to see what "Probabilities" has to say with regard to the character of the day. On its promises or forebodings he deems it safe enough to rely as to whether he shall take his umbrella under his arm to the store, or shall permit his daughter Emily to accompany the proposed excursion party; whether he shall order his correspondent at Detroit to ship a cargo of wheat by way of the lake, or suggest to his wife that in the expectation of a fine day she may permit the washing for the household to be done. How much of saving, of economy, of health, of happiness depend on the adaptation of human affairs to the weather we are just beginning to learn through the varied and increasing uses of the information supplied by this new institution. To be sure, the predictions with regard to the changes are not always entirely verified by the phases of meteorology in all parts of the country, but, considering the recent establishment of the service, and the inexperience of most of the observers at the many stations it has been found necessary to appoint, the accuracy of "Probabilities" in general has demonstrated the value of the service to the people. The intelligent and prudent farmer will not now sow his grain or mow his grass in the face of an approaching north-east rain. The intelligent ship-master will not hoist anchor and move out to sea when he knows that "cautionary" storm-signals have been ordered for the region of coast he intends to sail down. Verily, here is science to some purpose—science made practicable for the uses of a whole nation!

In our portrait we have the indication of a very fine nature; the temperament is sensitive, the mind very active and exceedingly nice and accurate in all its efforts. The head expands as it rises, being comparatively narrow at the base, and increasing in width all the way to the top. Such a person is a natural theorist and reasoner, and believes that everything in nature has a well ordered cause.

Observe the squareness of the upper part of the forehead, Causality and Comparison being very prominent. The side-head at the temples also expands as it rises, indicating large Constructiveness and Ideality, or a capacity for comprehending combinations, and the ability to invent and study out truth. He has also large Spirituality, which gives an appreciation of the higher forms of truth, and a sense of the life to come, a feeling that, as regards the world and creation,

"All are but parts of one stupendous whole,
Whose body nature is, and God the soul."

His Veneration gives him a profound sense of creative wisdom and power, a reverence for all that is great and sacred. His Benevolence is strong enough to make him sympathetical, kindly, liberal, and especially tender toward the helpless and the aged. He appears to have a well-developed crown, showing aspiration, self-reliance, the sense of reputation, and a hunger for appreciation by his friends, if not by people generally. He appears to have large Cautiousness, which gives prudence and guardedness; and we think his Combativeness is considerably larger than his Destructiveness; that he has, therefore, enterprise, earnestness, and spirit, without severity, harshness, or cruelty of disposition. He appreciates wit and poetry, philosophy, spirituality, art, refinement, and is capable of winning a position in the intellectual and social circles of life.

Cleveland Abbe is the son of George W. Abbe, a life-long resident of New York city, and was born on the 3d of December, 1838. He was graduated at the College of the City of New York, the old "Free Academy," in 1857. While engaged in his studies he developed a taste for mathematics, astronomy, and other branches of science, and after graduation was retained as instructor in mathematics, both at the University of Michigan (Ann Arbor) and at Lansing, Mich., for two years. He afterward took part in the Coast Survey Service, and had opportunity to pursue his favorite studies for three years under Dr. Gould, at Cambridge, Mass. His preference, however, was the study of astronomy, and in the furtherance of that he accepted the offer of a position in one of the finest observatories of the world, the Royal As-

tronomical Institution of Russia, near St. Petersburg.

After a stay of nearly three years at St. Petersburg, he returned to America, having obtained most valuable experience, and having visited many observatories on the European Continent. Here he was engaged in work at the National Observatory in Washington for several months, and while thus occupied he received a call to assume the dictatorship of the Cincinnati Observatory, which was founded, as the reader may remember, by the labors of Prof. O. B. Mitchell, and possesses one of the finest telescopes in the country, but which had been entirely neglected since the death of that eminent scientist and patriot.

To resuscitate this observatory, and to revive the interest of the people in its favor, were his aim and hope, and though Mr. Abbe labored for over two years to effect this end, the endowment requisite to put it on a firm and independent footing was not obtained, and the observatory finally became incorporated with the Cincinnati Institute.

While at Cincinnati Mr. Abbe carried out a most successful expedition, which occupied the most northern post of all the scientific parties that were dispatched to observe the memorable eclipse of August, 1869. His party was stationed in the heart of Dakota Territory.

It was while conducting the regular work of the observatory that he conceived and carried into execution the first practical attempt to form a meteorological weather-bureau in this country.

By earnest effort he succeeded in establishing, under the auspices of the Cincinnati Chamber of Commerce, some twenty or thirty posts of observation throughout the West and South, and along the Great Lakes, from which he received three times a day the results of simultaneous observations, as telegraphed to him at the observatory; and from these reports he compiled a "Daily Weather Bulletin," which was posted in the rooms of the Chamber of Commerce, and these "Probabilities" (for such they were first called by him) were eagerly sought and utilized for their business purposes by the large grain dealers and pork packers of that city.

This undertaking was carried on for sev-

eral months with marked success, and when, in 1871, the U. S. Signal Service assumed the character of a Meteorological Department, Mr. Abbe was called upon as the most competent man to act as its meteorologist.

TELEGRAPHING EXTRAORDINARY.

THE following is taken from the English scientific paper *Nature*: "At the Telegraph Office, Washington, on December 11, 1873, an experiment was carried out in the presence of Mr. Creswell, the Postmaster-General of the United States, the practical results of which will be of immense importance as regards the future of telegraphy throughout the world. On that occasion the President's last annual message of 11,500 words was transmitted from Washington to New York, a distance of 290 miles, over a single wire, in 22½ minutes, the speed obtained being over 2,500 letters per minute.

"At New York the message was delivered from the automatic instrument, printed in bold type, in presence of the Postmaster of New York. This achievement in telegraphy is the more remarkable, as the principle involved is not new, but was well known in 1848. The experiments made at that date were practically without result. By the new American combination of chemistry and mechanism the speed is apparently almost unlimited, messages, at the rate of 1,200 words, or 6,000 letters, a minute, being afterward transmitted with equally satisfactory results.

"Hitherto the speed attainable over circuits of similar length in this country by the Wheatstone automatic system, at present in use for the 'high-speed' service by the Postal Telegraph Department, does not exceed 200 letters a minute. The new American instrument has a great advantage, in the extreme simplicity of its construction, mechanical detail giving place to chemical action. One important result of this experiment is, that it demonstrates that hitherto the speed of transmission of electric currents through a metallic conductor has been restricted from mechanical imperfections in the mechanism of the recording or receiving instrument, and that by the substitution of chemical decomposition for mechanical action, an almost unlimited speed of transmission may be obtained."

VICE AND CRIME: THEIR CAUSES AND CURE—No. 2.

ULTIMATE ANALYSIS OF CAUSES.

IN the popular estimation, disease and premature death are seldom coupled with vice and crime. The former are too often supposed to be ordinances of nature, connected with the involuntary and irresponsible department of the human constitution, while the latter are charged to the responsible man. We are sick because we can not help it, and die because it is the will of Providence; while vice and crime are supposed to be the exhibitions of a perverse will. Sickness is no sin in the popular mind, but violation of some formulated statute, either human or divine—which is called crime—is heinous sin, and punishable with heavy penalties. How just this distinction is we will consider hereafter. Certain it is that they are both great evils, and that strenuous efforts are being made to alleviate or cure them with very poor success.

We make desperate efforts to inaugurate new schemes for the suppression of vice and crime, and yet we are daily forced to the inquiry if they are not on the increase in our midst. Fresh reports of the terrible depravity of human nature are all the while reaching us. The daily and weekly press teem with the horrifying details of new crimes, set forth in all their hideous monstrosity, and men, anxious for their own safety, are stimulated to new exertions toward protecting society and punishing the criminals, if not wreaking vengeance upon them. We attempt to exterminate them. We treat them as we would the pestilence, and not as one of ourselves. We try to believe that they are exotic to our civilization, and not indigenous to our social *régime*. We hang them by the neck until they are dead in desperate attempts to stamp them out of existence; but as we turn from our heartless efforts, we are startled by a new crop, grown, as it were, in a night, to mock us in our endeavors.

There must be causes, and powerful causes, for this state of things. Evil could not flourish as it does unless it fed upon rich pastures. Its physiognomy does not betoken starvation. It lives in luxury, riots in indulgence, and feeds upon the fairest of our sons and daughters. It grows steadily, and is spreading

its evil genius throughout all conditions of society. There are the vices of high life and the crimes of low life, the sins of the night and those of the day, private sensualism and public debauchery, all prompting to the inquiry, Why?

The religionist answers, Natural depravity. Granted. But why are not all men equally depraved? Why should one man be moral and upright, a pattern for his fellows and for posterity, while his neighbor is depraved, apparently, to the very center of his being? They both started with the same amount of original sin; what causes them to differ now? Surely not grace alone, unless the man outside of the church has more than the man inside. There are some other causes besides religion for the difference, else why do we find so much total depravity among religious statesmen? Why do ministers of the Gospel sometimes fall from grace and become criminals and outcasts? Why should any man once redeemed ever return again to the world? Evil habits bring only sorrow and suffering, while virtue brings happiness; why do we choose the former and reject the latter?

Herein lies the unsolved mystery. Here is the tale that we proceed to tell—the puzzle that we shall attempt to unravel. It is the same puzzle that has so often bewildered our ancestors, and is to-day the problem of problems. *Why will men act as they do?* is the question that has been asked and echoed, and asked again until its reverberations have become old and familiar tones. And as long as it remains unanswered, so long will all efforts at the relief of human suffering prove abortive.

Philanthropist and preacher have labored long and earnestly in attempts to restore the fallen, but a lost estate is seldom regained; philosopher and statesman have bent their energies to restrain the wicked, but they never cease from troubling; theologian and scientist have strenuously endeavored to purify society, but the continuous rumblings of social earthquakes teach us how little has been accomplished. It has not been for want of effort that we have failed, but because of

misdirected effort; it has not been for want of will, as some would have us believe, but for want of intelligence. We have been as zealous in preserving virtue as the Chinaman is in driving away the eclipse; we are as earnest in looking after the morals, religion, and social relations of our neighbors as the Roman Catholics were on St. Bartholomew's day, or as Calvin was in playing censor to Survetus; and the propriety of our course has often been quite as marked.

The church long filled its peculiar sphere, and yet drunkenness and other vices flourished almost unchallenged. Its teachings and practices in the past have often been such as to cause us to blush for our race; and yet no one will deny to it either earnestness or energy. It has fought a battle against what it conceived to be wrong with a vigor that would have rendered it invincible had its efforts always been well directed. No opponent but truth and nature could have withstood its matchless force and fury. But it must be confessed that it has often ignorantly fought against these. It has opposed in its incipency almost every reform of the past, as it is still found in opposition to the reforms of the present. *And yet it is really the mother of reforms.* It teaches the truth in the abstract, though it often fails to recognize it in the concrete, just as a loving mother, after years of separation, might fail to recognize the child of her bosom.

True religion is virtue. It stimulates conscience, cultivates morality, induces a sense of responsibility, and develops in man that love of right and hatred of wrong that is at the basis of human progress. Hence the church, in teaching religion, makes the reformer, while it often causes the reform.

The true province of the church is to teach man his responsibilities; to make him know that upon his own actions depend his conditions; and to stimulate within him an ardent longing for the truth. It should make him conscientious and spiritually minded; develop in him faith, hope, and charity, and enable him to live with an eye single to the establishment of truth and righteousness in the earth. When it gets beyond this, it gets beyond its sphere; when it undertakes arbitrarily to dictate to man what he shall or shall not believe, it is playing the part of a despot;

and when it exercises its authority to force submission to its decrees, it becomes insufferably tyrannical. It can no longer justify itself in the exercise of dogmatic authority, for it has blundered and stumbled and fought the truth so often that it can not further be trusted by intelligent men as the interpreter of truth. Dogmatic authority must go down before the march of intelligence, and reason and common sense assume their just position.

Truth can only be determined by scientific investigation. Fact, not fancy; knowledge, not speculation; science, not belief, must at length come to be acknowledged as the only correct basis of action.

Religion and science have been too long unjustly divorced. They are not antagonistic, but entirely harmonious when properly understood. Their spheres of duty are not the same; but they are nevertheless co-laborers in the great field of human progress. The one begins where the other ends, and yet they have neither beginning nor ending. *Science must be forever the investigator and exponent of truth,* while religion stimulates to such action as science declares to be right. Disease, vice, and crime, and every other form of human evil, must be treated in the light of scientific knowledge, rather than of religious speculation, if we would ever be successful.

The temperance reform offers another illustrious example of zeal, but not according to knowledge, of energy misdirected, and of success so partial as to suggest complete failure. For nearly a century it has labored with great earnestness, and with just enough success to prove the immense value of its ideas (I would say principles if it had any that it respected); and yet intemperance rages only less fearfully than formerly. That it has been of immense value to thousands of individuals, and to society as a whole, no one can reasonably doubt; but that it has reached the summit of its glory and its usefulness seems equally evident, unless it shall take a "new departure." Perhaps the time has come for that. It has accomplished of the good work all that it is capable of accomplishing without a much clearer conception and rigid application of *principles* than it has heretofore shown. It can not thrive upon vain expediency, no matter how valuable the expe-

dients may be. It must recognize its underlying principles, and faithfully adhere to them, if it would be that power for good that it is capable of being. I do not mean to say that temperance organizations may not continue aiding weak human nature as they have done, but only that they never can be successful in the prevention and cure of drunkenness until they make a systematic application of the *principles of total abstinence*, a thing which they are now very far from doing.

What are these principles? If total abstinence societies are based upon any principles whatever, it is that stimulants are poisons, and hence to be totally abstained from. A simple declaration that alcohol is bad as a beverage, is not a declaration of a principle, but of an isolated fact; and as long as one operates with reference to a fact without comprehending the principle involved, he is an empiric, and is simply doomed to defeat. The rum-seller's principles are much more clearly defined than the temperance man's ever have been; and hence his success. We must go behind the fact, and discover the law that explains it, before we have arrived at the principle; but when we have done this, our power becomes marvelously enhanced.

Principles are rules that always apply. They have no exceptions. If the use of alcohol is bad on principle, as we claim it is, it is always bad. There are no conditions nor circumstances in which a poison may be introduced into the living organism without injury to it. If alcohol is bad as a beverage, it is also bad as a medicine; if it is good as a medicine, it is good as a beverage. The fact that a physician prescribes it does not in any respect change its nature or modify its effects. Total abstinence is a great fallacy if alcoholic medication is science; *per contra*, if total abstinence is founded upon principle, that is, is scientific, drug-medication is a woeful delusion. To discover in the same person the advocate of these two practices, is to discover a sad illustration of logical inconsistency—an eloquent example of the fact that a man may believe anything, no matter how absurd, if it has been sufficiently long taught. Nothing short of the prestige of a system rooted and grounded in

human prejudice by two thousand years of almost unquestioned authority, could withstand the demonstrations of science and total abstinence as drug-medication has.

Total-abstinence men fail to recognize and apply their principles in still another important respect. They have never learned to discriminate between normal, and, therefore, legitimate exercise of the organs, and abnormal gratification of them. There must be a line of demarkation between the right and wrong, and that line must be drawn in obedience to general principles, and not in answer to appetites and passions. If men abstain totally from alcohol on principle, they are just as truly bound to abstain from all other substances that bear a similar relation to the organism. Discrimination to satisfy popular prejudice will never do. The principle of total abstinence involves rejection of all substances which, when introduced into the system, will produce abnormal effects. All stimulants, tonics, narcotics—drugs of every sort and kind, are comprehended within the principle.

Alcohol is dangerous, we are told, because its use produces an abnormal appetite which craves increasing indulgence. Every other abnormal indulgence does the same thing. There is not a stimulant, narcotic, sedative, or tonic in the pharmacopœia, that, when used, does not call for increased doses. Tobacco, opium, tea, coffee, etc., are to be classified under the same general head with alcohol; they are, when used, abnormal gratifications, and are properly comprehended under the principle of total abstinence.

Increasing desire is the test of an abnormal appetite. Proper gratifications always satisfy, while improper gratifications excite to desire, which demands increased indulgences from day to day. The use of healthful food or drink never induces excessive cravings. From childhood to old age the eater and drinker of only healthful substances desires such as the system needs, and never increases except as the needs of the system increase; but improper food and drink stimulate to gluttony and riotous excesses. Who eats food of the proper quality will not err as to quantity, if all his other habits are correct; who drinks only water, will never drink excessively; who exercises all the organs of his

body and mind in obedience to their laws will always hold them under control; but let him once enter on the downward path of abnormal self-gratification, and the end of the journey none can tell short of self-destruction.

It is the first step that costs. It is the first indulgence, no matter how slight it may be, that opens the flood-gates of passion, and renders each increasing indulgence more enticing. The tea-drinker prepares himself for the coffees; the coffee fails and tobacco is added, and this is followed, in the majority of cases, by wine, or brandy, or whisky—or, what is equally bad, pills and powders of a similar nature. But we must defer till another time, when we hope logically to prove these statements. ROBERT WALTER, M.D.

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Know,
Without or star, or angel, for their guide,
Who worships God shall find him.—*Young's Night Thoughts.*
The soul, the mother of deep fears, of high hopes infinite;
Of glorious dreams, mysterious tears, of sleepless inner sight.—*Mrs. Hemans.*

THE LESSON OF A DAY.

Oh, thou out-gliding day!
That knoweth neither hurry nor delay,
I cry with vain regret,
Oh, go not! go not yet,
Till I redeem thy chances cast away!
For in a vague, sweet dream
I drifted down thy smoothly-flowing stream,
Forgetful of the real,
In love of the ideal,
Yielding the things that are for things that seem.
Yet thou, thou wilt not pause.
Obedient to universal laws,
Thou holdest on thy way;
Nor wilt thou even stay
To hear me plead my weak, unstable cause.
It matters not at all
To thee, oh, day! whether I stand or fall—

Whether I boldly seize
Thine opportunities,
Or let them slip, for aye, beyond recall.
As passionless as fate, [wait
Thou turnest at time's wheel, and while I
For some auspicious hour
To bring my hopes to flower,
Lo! the night drops, and I am desolate.
Thy light strikes through and through
The cobweb of my life, oh, witness true!
Thou showest every one
The deeds that I have done—
But showest thou the good I meant to do?
Sweet day, thou teachest me
That good intents are nothing till they be
Incarnated in works;
That one who idly shirks
The present task has no reward in thee.

DREAMS AND THEIR FULFILLMENT.

DREAMS break in upon the unconscious slumberer, visions disturb mental inactivity, spirit paintings are hung on memory's walls, nights are made sensational by soul-impressing shadows of coming events. Tables tip, raps are heard, the world careens, and "dreamers" are jostled by learned bigots and knowing skeptics whose tongues are trained to say "humbug" without a passing investigation; while the credulous stand agape with amazement, believing the whole invisible world thrown open to view, with the first ripple of light across the mirror of the soul.

Two extreme views of a mysterious something, which is transcribable by a third, under the classification of sleight-of-hand, odic force, and psychology, and to these three agencies, it is believed by many, all of the strange phenomena that are manifested by the various manipulations and laws of subtile force and spirit power are attributable.

But of each, or all of these, it is not the object of this article to inquire; but to nar-

rate, in brief, some facts directly connected with, and forming a part of, the life of the writer regarding dreams and foretelling coming events.

Dreams formed a leading feature in my sleeping hours nearly as long ago as memory extends; and so frequent were they that they neither awoke anxiety nor comment up to the time when I had reached my seventeenth year. And not until the Fall of 1852 was there the slightest attention paid to the rough impressions made by them on the mind. At this time it was my fortune, or misfortune, to leave my home in the East for a then distant State in the West, where, alone and among strangers, the real cares of life began. Isolated from all associations then held dear, seventy miles from a post-office, and two hundred from the nearest railroad, the intervals between the reception of news from home seemed ages, and the days were counted and the hours anticipated when tidings from friends would greet me again. Then began a series of dreams which have accompanied and foreshadowed the future for the past twenty years. And though the same dream brought or was the procurator of the same events, yet it was impossible to perceive any possible relation between the dream and the fact. But, nevertheless, for ten years, there was not a single instance that seven or more days before receiving news from home I would not dream of walking and talking with some friend who had died years before. Meeting an old friend, a few days ago, who has a son down near the Indian Territory, he remarked: "I am going to hear from James, for," said he, "I had a long talk with your brother (now dead), a few nights ago, and it has never failed me." About three hours after, meeting him in the post-office, he held up a letter, and said: "I have just received a letter from James."

In the Fall of 1860 I came into possession of a more than common thoroughbred stock horse, dapple chestnut, seven years old, and weighing fourteen hundred pounds. Docile as a kitten, yet full of the renowned vigor of the wild Norman, the horse was a great favorite with us all, because of his beauty and excellence, and to me was a fruitful source of both pleasure and anxiety. Retiring one night, as usual, I dreamed that my favorite

horse was dead. The vision (if one it was) did not leave me with the blank impression that he was dead, only, but carried me minutely through the entire struggle until death ensued. The scene opened in a strange place; I was crossing a small stream or rivulet with my horse, when a thick-set, dark-complexioned man approached from the rear and assaulted the horse with an axe, severing one of his limbs, and, in spite of all my power, succeeded in maiming him to that extent that he struggled only for a short time, reared and fell directly back, and when he struck the ground was dead. This made a strong impression upon my mind at the time, so strong, indeed, that every means was made use of to guard against an accident. I could not shake off the impression of that dream, and I went so far as to offer him privately for half his value, and should have disposed of him at a fair price, in a few days, but for an accident (if such it may be called) which finished my efforts in that direction.

Several weeks had passed, and I began to think that my dream was but a dream after all, when business called me to an adjacent county. Taking an early breakfast, I hitched my favorite horse to the buggy and drove away. Precisely at eleven o'clock that day we crossed a small stream or run, where I watered the horse, and then drove him only about thirty rods farther when I was obliged to stop, the horse appearing to be suffering the most intense agony. I detached him from the wagon and made use of every appliance that could be procured for his relief, but without avail. In forty minutes from the attack, and while I was leading him, he stopped, reared upon his haunches, and fell directly back, dead. I employed two men to dig a hole for him where he fell. When the pit was ready they found that one leg had to be cut off before he could be well got into it, because his limbs had assumed inflexibly the position they took when he fell. After some investigation it was ascertained that a man had entered my barn the night previous to his death, and had mixed arsenic with the grain that was always prepared the night before for the horse's feed, and the poison evidently did not take effect until the watering at the brook.

Losing some property about this time, and

failing to gain any knowledge of its whereabouts, I was prevailed upon by a friend to consult a lady, then living in Madison County, New York, who claimed to be a clairvoyant. I found her at home with her family; everything about her bore the air of refinement and culture. Nothing in the house betokened anything out of the course of ordinary life. I judged the lady to be not far from seventy years of age, and when I made my business known she said that she "would tell me all she could," and seemed to manifest considerable interest, for, after descanting upon my loss, she glided quietly off upon my future life, its changes, misfortunes, and fortunes. To-day, after passing through years of ups and downs, I must say, in justice to her memory, that all but two parts of what then seemed to me a terrible drama has come to pass, and one of the last two begins to light up the horizon. And the question forces itself upon the mind, how could these changes (the very properties out of which they

were finally wrought had yet no existence except in embryo) impress the mind of this lady in such a manner that, long after she had turned to dust, the acts were being fulfilled? This could not have arisen from any brain-wave theory, or by reading the thoughts of others. Among the things that she unfolded that day was that I had a valuable horse, which she described very minutely, ending by saying that he had a white spot on his right side, about the size of a twenty-five cent piece. This I flatly contradicted. The horse at that time occupied a box-stall in a double boarded barn, to reach which two well-fitted and locked doors had to be opened. Besides, the horse was then enveloped in a large, close-fitting, double blanket, covering him completely from below his eyes to his tail, and the doors were not unlocked from the time I left in the morning until my return. My first business, after going into the barn, was to enter his stall, lift the blanket, and, lo, the white spot was there! What was it?

A. B. CRANDALL.

HOW TO ENDURE.

"CAN an invalid write anything healthful?" was the inquiry made of one whose whole life has been a contest between illness and partial returns of health. Let facts speak for themselves.

There is a very old book which says, "If thou faint in the day of adversity, thy strength is small." Sickness is the keenest kind of adversity. So the invalid who endures suffering with all patience and oftentimes cheerfulness, possesses a strength, both intellectual and moral, which the one who frets and murmurs and pines knows nothing of. And often the feeblest woman in the power of endurance rises far above the strong man vexed by the least tapping of disease at the doors of his frame.

One such I knew, a fair girl of eighteen, whom an attack of facial neuralgia had reduced so low that she could not walk without assistance, and could sit up but a short time each day; whose nights for three months were sleepless from pain, and who had no power to take other nourishment than was given by a tea-spoon. "It is very hard," she said, "but it might be worse, and I shall

get well some day. I am going to make that article I began, for when our friend is far away, he will look at it, and remember what a sick girl can do." So, sitting in her easy chair, she worked with her fingers day by day until the elaborate and beautiful gift was completed. "I believe making that helped me to get well," she said, "for I had to think of *it* instead of the pain."

"Well, if I am nervous from pain for a few hours," says another, "I have intervals of ease, and then I feel so thankful when I can take up my pen and write thoughts which have come to me when lying wakeful at night. And I look around my room and see how many comforts I have, and think of the many who have so very little, and whose hours of suffering are not soothed by kindness and the attentions so greatly needed. And I can bear and be grateful, and pray for those whose lot is not blest as mine. I do wish sometimes tired nature's sweet restorer would visit my pillow oftener and stay longer, but then as I lie awake I look out and see the bright stars above me, and the lights from the windows of our neighbors; and

then come memories of the past, cheerful memories of the good and the loved. Now, if I were sleeping I would not have these to enjoy, for the noise and labors of the household in daylight disperse such thoughts. And I often fancy I hear the songs of ministering angels keeping watch around my bed. If it *is* fancy it is no wrong, and if it is poetry, it is "a thing of beauty, and a joy forever." And it is often such a comfort, when unable to leave my bed, to be propped up with the pillows, and with pen and paper send letters to friends far away. Or to write thoughts which may cheer and soothe others afflicted like myself." Oh, this lifting even one finger to lighten the burdens of others, takes off half the weight of our own.

Try it, oh, wearied one; aid by thy counsel and by sympathy, and be blest.

Well, then, when suffering ceases for a while, one wants to make up for lost time. I feel as if I had been on a journey somewhere, and had returned—I find so many things out of place, so many things needing busy fingers to repair them. Then the pen which has been idle must go to work, and ideas seem to flow faster and come more freshly in these intervals of strength.

Look on the bright side of life; think how many blessings are yours; think how many suffer from diseases far worse than yours; bless God for the desire and the power to rise above the physical, and enjoy the mental.

ETHEL.

Physiognomy, or Signs of Character.

Of the soul, the body form doth take,
For soul is form, and doth the body make.—*Spenser.*

MARIE SOPHIE SCHWARTZ—PORTRAIT.

THE EMINENT AUTHOR.

HERE is a head and face of remarkable power. Many, at the first glimpse, would be disposed to exclaim, "Strong-minded," and accredit her with views well-entitled, perhaps, as ultra-womanish. The face, though wearing the typical Scandinavian strain, as perceptible in Jenny Lind and Nilsson, yet certainly displays more striking elements of character. The high, reflective forehead, the earnest, steady eyes, the firm mouth, and positive chin are revelations in themselves. There is the robust energy of the man mingled with the tenderness and emotional susceptibility of the woman. The very marked development of the crown, that very large Firmness and strong Self-esteem, tell the story of struggle, trial, aspiration, and achievement. There is an equipoise of faculty which could not be otherwise than the result of self-culture and varied experience. The temperament of Madame Schwartz is chiefly of the motive order, and to it, in the main, she owes her successes; it has impressed her mental life with enduring, plodding energy, and offset any tendency to irritation and impatience

which her rare executive organization might experience when working at some difficult undertaking. How keen her discernment of character in others! That sharply outlined forehead, so lofty at Human Nature, cleaves through the mask of assumption and affectation, and reads the heart of the would-be impostor. The organs contributing to memory and analytical judgment are also well marked. Hence the minuteness and delicacy of her portraiture of character. She appreciates the differences of people, as regards their individual humors and caprices, as very few appreciate them, and her published works abound with proof of this mental power. She is truthful withal, and seeks certain positive ends in whatever she attempts. With that face before us we could not impeach her with selfish aims, although ambition has lent its stimulus to her effort.

Madame Schwartz was born in Boras, West Gothland, on the fourth of July, 1819. Her family name is Birath. Her parents died when she was a very small child, leaving her to the care of an uncle, whose death, shortly

afterward, left her in circumstances bordering on destitution. In order that the girl might learn to support herself, a friend of the family secured for her instruction in painting, an art in which she became well skilled, and so was enabled to sustain herself in comfort.

In 1839, when twenty years of age, she was married to Professor Schwartz, whose strong prejudice against the pursuit of art and liter-

enviable fame. After her husband's death, her full name was given with her works, and she is to-day universally regarded one of the foremost of Scandinavian authors. Her books have been translated into German, and she is quite as favorably known in Berlin as in Stockholm. It is but recently that American readers have made her acquaintance through the excellent translations of some of her



Marie Sophie Schwartz

ature by women led her for a time to lay aside both her brush and pen, for she had already begun to write as well as to paint. Eleven years later, however, her husband consented to the anonymous publication of her first novel; and the cordial reception accorded to this by both critics and public led to the publication of others, which gained for her initials—they alone appearing—an

volumes by Misses Selma Borg and Marie Brown; and she has become a favorite with us as with the Germans.

A few lines from her writings will give the reader an impression of her power in sketching character. For instance, of Mirabeau:

"The light from the candelabra fell upon the stranger's features, which were at once homely and attractive.

"There was something of the lion in them, so large and rough hewn did they seem, and yet they chained the gaze. His brow was irradiated with a peculiar light, or rather with a reflection from the brilliant eyes, which gleamed and flashed with genius. In this face, scarred by disease, somewhat relaxed by passion, but beaming with energy and intelligence, could be read that its owner was gifted with a measure of genius, that a higher power had destined him for great deeds and a deep hold in human events."

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"Countess ——— was one of those women who are rightly called dangerous and irresistible. It is impossible to say wherein their power lies, but it is equally impossible to escape them. She was far from handsome, would scarcely, upon a closer examination, be called good-looking, and yet she was spoken of for her beauty. Her features were irregular, and only the flashing and intelligent eyes could account for her being called the beautiful Countess ———. Her eyes were rather small than large, but they had an expression which captivated magically, and made it impossible for one to forget them or to weary of looking into their depths. They made one forget that her nose was too small, and that her mouth was not pretty. Her hair was unusually abundant and of a light chestnut brown, assuming at times a reddish tinge when seen in a certain light, which gave it the appearance of being sprinkled with gold dust; it was also wavy, so that it resembled a light cloud. The countess was tall, lively, gifted, proud, and thoughtless, changeable and imperious, willful and coquettish. Always variable, always new, never the same. One moment gentle as a dove, the next passionate and capricious as a tyrant. One day rapt and absorbed, abandoning herself to romantic dreams, the next laughing at idealism and worshiping folly. She displayed an unheard-of perseverance when a conquest was to be made, either of a man or woman, who did not appear willing to render her the homage she was accustomed to receive; but the moment she had conquered the reluctant subject she lost all interest for the one she had made so much effort to win. * * * She had too much ability to be a coquette of the

usual order. She did not attempt to captivate with bare shoulders, a small waist, languishing glances, charming smiles, nor the fashionable style of her dress. The countess employed neither rouge nor padding, jewelry nor flowers to enhance her charms; she had chosen quite another means. 'The silly may busy themselves with that nonsense, which, after all, will not hinder them from being tedious and growing old,' thought the countess. She determined to be original, and that in a way that would make her the most courted of all attractive women." * * *

"The main trait in the major's character was self-love and lack of respect for everything old. He was a hater of the nobility, of aristocracy, because he was a quite insignificant member of it, without property, and placed on one of the lowest rounds of the ladder in his caste, instead of being, as his self-love demanded, one of the most distinguished and most considered. As he could not be one of the first, he did not wish to be one of the last, but appeared against the whole class, and drew a certain attention to his name by the liberal views he entertained, and by defending the rights of the people in the Diet."

How well she had contemplated the "best society," and the ways of the civil service, may be inferred from the following sprightly extract:

"My dear, think of what we owe to our position in society. I am rich, rich through you, and if we lived retired would it not look in the eyes of the world as if I were a miser who only thought of investing his money? And besides, what enjoyment could one then have of existence? None. Now, on the contrary, fortune gives me the opportunity of leading a life agreeable in every respect. My horses excite admiration whenever we drive out; my establishment is considered the most elegant, an actual model, after which all desire to pattern their dwellings, for a great part of the furniture is imported. I am the one who gives the *ton* in our society. People know that what I have is modern and tasteful, as well as manufactured in Paris. You, again, are the object of all the ladies' envy and all the gentlemen's admiration. When you appear in company, one examines every detail of your attire; have you a new,

foreign style in your dress, your mantle, or an unusual material, the other ladies will take pattern from it directly. You are young, you are rich, you are a genius, and besides, *my wife*; you ought, consequently, to live in the world which pays homage to you, and think that this homage is a real pleasure to me, for the applause which we reap from our fellow-beings contributes very essentially to the true value of life. Besides, you ought to consider what a great advantage it is to me to live in fine style and associate in the higher circles. I win favor, and through this, it will be easy for me to get promoted before others who neither possess my merits nor the ability to gain friends and protectors through

the means which wealth affords. President S——, for example, is obliged to borrow money; he turns to me. At the next promotion he says a good word for me to the government, and I am advanced directly. I have a fine house, and people strive to gain entrance to it. The result is that they have every reason in the world to favor my success. We have entirely left the subject, and I am obliged to be in court at eleven o'clock. You will thus go to the opera this evening, where I will come for you, as I shall dine with Count O——. Apropos, my dear, you really made me feel badly at the concert, Tuesday, when I came to accompany you home. Goodness, how you were dressed, black as a nun!"

HEADS AND HATS AND CHARACTER.

IT does not require, in all cases, a close and particular examination of the head to obtain, approximately, the outline, the drift, and spirit of the character. One does not



Fig. 1.



Fig. 2.

need to take a tailor's or a shoemaker's measure of a man on the street to be able to say, "That is a large, finely-built man," or "he is disproportioned and clumsily organized;" or "he is small," or "thin," or "round-shouldered," or "stout," or "stubby," or "pursy," or "flat and flabby." The eye, practiced by daily contact with many people, quickly takes the measure of the general make-up of men. In fact, a shoe-dealer looks at a foot, a hatter at a head, or a clothier at the figure of a person and walks away to the right boots, hats or coats, and frequently brings the very garment that will fit to a nicety.

In the selection of a stiff hat for a customer, the hatter looks into the old hat to discover

its shape—whether it be a long oval or a short oval, or is nearly round; then he looks for a hat of similar shape, and comes very near a fit at the first effort. Some men have heads nearly square; some have long, thin heads; and some of these peculiar shapes must be fitted, if fitted at all, by having hats made or blocked specially for them. If they do not have them thus carefully blocked to fit, and have the rim properly formed, there is, in the case of the square head, an awkward flattening of the hat, compelling the rim to droop in front and rear and curl up at the sides, while in the case of the

store hat, which is forced on a round or broad head, the rim is awkwardly arched fore and aft, and lopped down at the sides. Let the reader look at men while walking behind them, and the points which our engravings represent will be readily seen.



Fig. 3.

In respect to one with a narrow head, the hat will appear flattened at the sides. In respect to the other, the head being broad and fully rounded out, the hat looks broad when it fits the head, and the brim is warped and drawn out of

shape. In the character of the first (see fig. 3) there may be expected frankness, not much force, policy, or severity. He may be social, moral, and intellectual. The second will be sly, severe, quarrelsome, if opposed; will love money, and be likely to indulge the appetite. He will work hard, and, as it were, bruise his way, if necessary, through the world. The narrow-headed man, on the other hand, will think, plan, look ahead, work his way easily; will go around the hill rather than over it, and make his head save his hands in many ways.

A word or two with regard to the hat itself. Men often ridicule the ludicrous fashions of women, making fun of their "bushel-heads" and little bonnets; their

long, dragging dresses, and their tight laced waists; their high heels, and—well, the ladies retort and make fun of our ridiculous stove-pipe hats—and well they may, for they are uncomfortable, inconvenient, not at all healthful, and, at the same time, expensive, easily soiled, and soon come to look shabby. What is there more comfortable, economical, or suitable for any and all occasions, than a light, soft felt-hat? It need not weigh more than four or five ounces; it may be ventilated, or made of material which will permit perspiration to pass off, and so prevent a par-boiling of the upper portion of the scalp, which makes so many men bald-headed. Why not wear a common-sense, soft, light, easy, pleasant hat, instead of those unsightly, unhealthful stove-pipes?

SOME FUNDAMENTAL PRINCIPLES IN PHRENOLOGY.

UNDER the title of EXTRACTS FROM SPURZHEIM, Mr. F. H. Burbank contributes the following to the *Herald of Life*, a weekly religious newspaper, published in Springfield, Massachusetts: "It is an error to say that animals act solely by instinct. It is true that some of their doings, such as the labor of insects, are the result of mere instinctive powers; but many animals modify their actions according to external circumstances; they even select one among different motives, and often resist their internal impulses or instincts. A dog may be hungry, but with the opportunity he will not eat, because he remembers the blows which he has received for having done so under similar circumstances. If, in following his master, he is separated from him by a carriage, he does not throw himself under the feet of the horses or the wheels, but waits till it has passed, and then by increasing his speed he overtakes his master. This shows that some animals act with understanding. On the other hand, though new-born children cry, and suck the finger, they certainly do not act from understanding. And, if men of great genius manifest talents without knowing that such faculties exist; if any calculate, sing, or draw, without any previous education, do they not so by some internal impulse, or instinct, as well as the animals which sing, build, migrate, and gather provisions? Instinct, then, is not confined to animals, and understanding is not a prerogative of mankind. * * *

"Did animals and men learn all from others, why should individuals, similarly circumstanced in regard to manner of living and instruction, excel the rest? Why should one nightingale sing better than another

living in the same wood? Why, among a drove of oxen, or horses, is one individual good-tempered and meek, and another ill-natured and savage? M. Dupont de Nemours had a cow which, singularly, knew how to open the gates of an inclosure; none of the herd ever learned to imitate its procedure, but waited impatiently near the entrance for its leader. I have the history of a pointer, which, when kept out of a place near the fire by the other dogs of the family, used to go into the yard and bark; all immediately came and did the same; meanwhile he ran in and secured the best place. Though his companions were often deceived, none of them ever imitated his stratagem. I also knew of a little dog which, when eating with large ones, behaved in the same manner, in order to secure his portion, or to catch some good bits. These are instances of genius among animals, which are by no means the result of instruction. Children often show particular dispositions and talents before they have received any kind of education. Almost every great man has, in infancy, given earnest of future eminence. Achilles, hidden in Pyrrha's clothes, took the sword from among the presents of Ulysses. Themistocles, when a child, said that he knew how to aggrandize and render a state powerful. Alexander would not dispute any prize at the Olympic games, unless his rivals were kings. At fourteen years of age, Cato, of Utica, showed the greatest aversion to tyranny. Nero was cruel from his cradle. Pascal, when twelve years old, published his treatise on Conic Sections. Voltaire made verses when only seven years of age. The number of such instances is very great, and it is unnecessary to mention

more here, as they must be within the scope of every one's knowledge. * * *

"After having seen what nature does in man, let us inquire into the means by which she effects it. Religious people commonly believe in a mere supernatural dispensation of gifts; but there can not be a doubt of natural causes also contributing to produce the phenomena of mind. I may follow the example of other natural philosophers, and confine myself to proving a relation between the body and the manifestations of the mind, or I may endeavor to determine the special powers of the mind and the respective organs. This latter task has been accomplished by *Phrenology*. Here I shall only show, in a summary way, how reasoning coincides with observation. It is important duly to appreciate my expressions upon the subject. I do not say the organization produces the affective and intellectual faculties of man's mind, as a tree brings forth fruit, or an animal procreates its kind; I only say that organic conditions are necessary to the manifestations of mind. I never venture beyond experience; and, therefore, consider the faculties of the mind only in as far as they become apparent by the organization. Neither denying nor affirming anything which can not be verified by experiment, I make no researches on the lifeless body nor on the soul alone, but on man as a living agent. I never question what the affective and intellectual faculties may be in themselves; do not attempt to explain how the body and soul are united and exercise a mutual influence, nor examine what the soul can affect without the body. The soul may be united to the body at the moment of conception or afterward; it may be different in every individual, or be of the same kind in all; it may be an emanation from God, or something else. Whatever metaphysicians and theologians may decide in regard to these various points, the position, that manifestations of the faculties of the mind depend, in this life, on organization, can not be shaken. Let us, then, consider the proof which reasoning affords of this principle of *Phrenology*.

"I. *Difference of the sexes.* The faculties of the mind are modified in the sexes; some are more energetic in men, others in women. Do, then, the souls of men and women differ, or is it more probable that the faculties are modified because their organs or instruments vary? *Phrenology* shows that certain parts of the brain are more developed in men, others in women, and thus renders the peculiarities in the mental manifestations of each easily explicable. There are, however, many instances in which the intellectual faculties of women resemble those of men, and the contrary.

"II. *Individuality of every person.* The mental faculties are modified in every individual. Now, is it probable that the soul

differs universally, or is it more likely that, as the whole human kind has descended from an original pair, all modifications of the faculties may be explained by differences in the organs on which each respectively depends? Like species of animals, and man, also, have essentially the same corporeal structure; there is merely difference of proportion and development in the various parts of which the body is composed; and these differences in the organs produce corresponding varieties in the functions attached to them.

"III. *Ages.* Mental manifestations are modified by age. Either the soul, or its instruments, therefore, must produce these modified manifestations. It is ascertained that certain faculties appear early in life, or at a later period, according as the peculiar organs of each are developed. The same law holds in both affective and intellectual faculties; the manifestations of all are not simultaneous. Several of both orders appear in infancy, others not before maturer years; several, too, disappear earlier, while others endure till the end of life. Now, as we know that manifestations of the mental powers always accord with certain organic conditions, it is impossible to overlook their dependence on organization."

PUT DOWN THE BRAKES.

No matter how well the track is laid,
No matter how strong the engine is made,
When you find it running on the downward grade,
Put down the brakes!

If the demon of drink has entered the soul,
And his power is getting beyond your control,
And dragging you on to a terrible goal,
Put down the brakes!

Remember the adage, "Don't trifle with fire,"
Temptation, you know, is always a liar;
If you want to crush out the burning desire,
Put down the brakes!

Are you running in debt by living too fast?
Do you look back with shame on a profitless past,
And feel that your ruin is coming at last?
Put down the brakes!

Whether for knowledge, for honor, or gain,
You're fast wearing out your body and brain,
Till nature no longer can bear the strain,
Put down the brakes!

The human is weak since old Adam's fall,
Beware how you yield to appetite's call, [Paul;
"Be temperate in all things," was practiced by
Put down the brakes!

Ah, a terrible thing is human life!
Its track with many a danger is rife;
Do you seek for the victor's crown in the strife?
Put down the brakes!

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—William Penn.

MONEY—ITS FUNCTIONS AND REQUIREMENTS.—No. 6.

[CONCLUSION.]

THE OUTLOOK FROM THE PRESENT SITUATION.

IN ocean transportation we compete with a people who were so fortunate in their rulers as to be protected in their domestic money by cutting all money affiliations with those who could destroy them for a period of more than 18 years, thus making them creditors, with ample resources, instead of debtors, like us, whose money existence depends on the will of others.

By recognition of, and affiliation with, our insurgents, they wiped most of our merchant marine out of existence, and we, in grateful return for that and other courtesies, form a Credit Mobilier, to keep the use of our own money at so high figures that it is prohibitory of that industry which, in former times, was productive of so much pride and profit to us—we mean

SHIP-BUILDING.

The Secretary of the Treasury says, in his Report, December, 1872:

“The condition of our carrying trade with foreign countries is always a subject of interest, and at the present moment it is one of solicitude. The imports and exports of the United States, excluding gold and silver, amounted to \$1,070,641,163 for the fiscal year ending June 30, 1872, and of this vast trade only 28½ per cent. was in American vessels. In the year 1860 nearly 71 per cent. of our foreign commerce was in American ships; but in 1864 it had fallen to 46 per cent., in 1868 to 44 per cent., and in 1871 to less than 38 per cent. The earnings of vessels engaged in the foreign carrying trade probably exceed one hundred million dollars a year, of which less than one-third is earned under our own flag.”

The Secretary estimates earnings of freight money at \$100,000,000, a very low estimate.

We had in 1860 70 per cent., or.....	\$70,000,000
We had in 1871 38 per cent., or.....	38,000,000

Annual loss in earnings of shipping....\$32,000,000

The loss of the business of building is at least \$200,000,000—including lumber, labor, and other material.

A first-class steamer equipped for freight

and passengers, ready for sea, costs \$800,000. If built by the English, with money at 3 per cent., the

Yearly interest on the same would be.....	\$24,000
If by us, with interest 12 per cent.....	96,000

Excess of our interest over theirs, per year....\$72,000 or about \$1,400 per week, or \$200 per day, being the tax or prohibitory duty in favor of our oligarchy, and our amiable cousins across the water, which our Government, by its utterly absurd restriction on our currency, imposes on that industry in particular, as well as our country in general.

One of our most distinguished statisticians, Horace H. Day, says: “On the Clyde, in Scotland, ships are built and fitted out, with this indispensable tool (money) to work with, at 3 per cent., and sometimes 2½ per cent., while in this country, as I have said before, everything measured by money is *as much* higher in value as the difference in the legal rates established by the two Governments in the consols of the one, and bonds of the other. And if a ship-builder to-day, in Maine—most of them are in moderate circumstances (say he is a farm-owner worth thirty thousand dollars)—wishes to build a five hundred ton vessel, he must begin by paying, first, at least 15 per cent. annual interest on the mortgage of his farm to get the ready cash with which to commence his ship, and as he is not a merchant, keeps no bank balance, and hence can not borrow at banks, as he proceeds will pay 20 per cent. per annum for the balance of the funds before the ship is paid for (*I know this exact case to be the fact in Maine*); and this is not all, for by reason of the general system of high prices for everything in this country (due wholly to the high rates upon money), the material and wages are found to-day so much higher in the United States than in England that the business is a losing one, and hence we can no longer build ships, while all the remedies now being proposed in Congress and elsewhere would only fail in producing a healthy result, and ultimately create greater than existing evils. It

is this fatal financial system, born of war, established since and maintained by the Republican Party, which deprives the people to-day of their necessary tools (money) to work with, and the whole country of its rightful inheritance of prosperity."

Effect this legislation, as England partially did, and the same results which inured to her will accrue to us, but to as much greater extent as our natural resources and position are superior to hers.

Agriculture, ship-building, and every other branch of industry, will jump at the word "go." Our factories, which now feel poor if not making semi-yearly dividends of 10 per cent. (20 per cent. per year), would then, measuring themselves by the Government standard, be satisfied with a much less profit.

Their fabrics would be exported, and the nation occupying the midway position geographically between the swarming populations of Europe and Asia, with resources superior to either and creditor of both, would be the money center of the globe. And now for the

MORAL ASPECTS OF THE SUBJECT.

Our clergy are grieved, astonished, and perplexed at the demoralization witnessed in the *financial* walks of life.

Our citizens abroad, just rid of the stigma of slavery, find themselves facing a national reputation of a more loathsome character.

The name American in Europe is almost, if not quite, a synonym for blackleg and swindler.

The reason is that the dazzling operations of the Jim Fisk tribe and our money oligarchies have so dazzled our youth, that not one of a hundred of our educated and enterprising young men adopt a productive occupation as a life-business.

Few will stop at mercantile business, as it is too slow; no distinction is made between wealth-producing and money-getting. Gambling is no longer proscribed. Will any one deny that nine-tenths of Wall Street business is gambling?

As the young man approaches the time when he must select his future occupation, he sees, or rather *thinks* he sees, in the productive branches life-long, imbruting toil and social ostracism, with no opportunity for wealth and distinction.

Commercial life was accepted until of late, but the labors and responsibilities are so great as compared with financial life, and the money result so small, that this is passed by, and Wall or State street accepted. And we can not won-

der when we examine the present status of each.

Let us suppose a young man with a patrimony of \$20,000. On examining the prospects for commerce, he finds that, owing to the high rate for money, he must incur a

Rent of say	\$3,000
Interest on \$20,000 at 10 per cent.....	2,000
Clerk hire—say salesmen at \$1,500 and \$1,000....	2,500
Book-keeper, \$1,500; boy, \$250	1,750

Minimum of current expenses \$9,250

With this capital and the above force, he is fortunate if, at the end of the first five years, he has done \$200,000 per year, at an average *gross profit* of 7½ per cent., of which ½ or 2½ per cent. he finds is in bad debts and other losses:

Leaving net 5 per cent, or.....	\$10,000
From which deduct expenses, as above	9,250

Leaving for his net profit	\$750
Which added to the interest per year received...	2,000

Result for his capital, labor, and skill \$2,750

He turns to Wall Street, finds that he can obtain a desk per year for \$250; no book-keeper, salesmen, or boy, which is a saving of \$7,000. Instead of, as a merchant, being at his post at 8 A.M., to be actively engaged until 5 P.M., his office hours will be 10 A.M. to 3 P.M.

In lieu of laborious and costly "drumming up" of customers and selling goods on credit at 7½ per cent. for single names, he quietly waits until paper of the same class and equal merit is brought to him, bearing in addition a first-rate indorsement, or secured by undoubted collaterals, which he can buy, doubly secured as above, at the same profits as that for which the merchant incurs the cost, labor, and risk in selling goods.

He can easily do the same amount per year, and thus, with less labor and risk, he obtains

Say 7½ per cent. on \$200,000.....	\$15,000
Add 10 per cent. on his capital of \$20,000	2,000

Net results in Wall Street.....	\$17,000
" " outside.....	\$2,750

The above are trustworthy estimates—outside for commerce and inside for Wall Street. So far he has been a neophyte. He gradually learns the *inside track*—the mysteries of "takes and puts," "bulls and bears," "long and short"—corners in stocks, gold and currency; purchasing interests in leading newspapers, affiliation with popular churches, control at boards of directors, legislatures of States and departments, Congress of the nation. If a dozen men can steal railroads, can not a powerful oligarchy steal the republic?

Can we wonder that the teachings of Christ are supplemented by those of Iago — "*Put money in thy purse.*"

WHERE CONGRESSIONAL APATHY WOULD HAVE LANDED US IN OLD TIMES.

I know of no evidence showing that the fathers of our political system, when they published the Declaration of Independence in 1776, had any idea of the ultimate form of government that their action would result in.

Congress was, in a manner, a provisional government, and in drawing that paper, acted as a grand jury, and indicted their former affiliations as a nuisance, trusting to the common sense of the people and their representatives to meet exigencies as they might occur.

When matters had further progressed, and the time to form the permanent government had arrived, they found that history recorded four prominent forms of government, to wit: 1st, monarchy—power lodged in a single person; 2d, aristocracy—power lodged in a small number; 3d, democracy—power lodged in the collective people; 4th, republic—power lodged with representatives of the people.

Had they adopted the apathetic and reckless mode of our late Congresses, instead of investigating the merits of each, they would by committee have called on the monarchists, as possessed of the longest record and largest influence, who would have told them that *monarchy* was what they required, because—

1st. It had the greatest prestige, its existence running far beyond where the light of history could trace it.

2d. It was accepted by the human race almost unanimously.

3d. It bore the divine indorsement.

4th. History did not record a long existence of any other form of government.

5th. Any other system would lack affiliation with other nations, and result in isolation from the "rest of humanity."

Jefferson, Sam Adams, Franklin, and other statesmen of the new school, would not have been called on; but by button-holing members, and an occasional tract, they might have argued that monarchy, proceeding from the family and thence through the clan, was entirely adapted to the advance through savagism and barbarism to civilization, and, as a sequence of its being best for those people and times, might not illogically be claimed as of the grace of God.

That the failures of the past were caused by the introduction of anti-republican elements in the organizations; by the undeveloped condi-

tion of the people, and by the pressure and invasion of adjacent monarchies; that the education of our people and our geographical position were such that a parallel would not hold; and as for national sequestration, although entirely improbable, would, with our parallels of latitude and longitude, have its benefits as well as evils, and we could stand it if the "rest of mankind" could.

These arguments would have been considered as chimeras of visionary and impractical men, and the committee on form of government would have brought in and advocated a bill to establish monarchy, perhaps formed by the ministers of George III., exactly as do our committees on finance and the currency, report in the interest of the money oligarchy, and with about the same arguments. Perhaps the chairman of the committee would travel around the country, assuring the royalists that, although the Tom Jefferson's ideas might pass the House, they would inevitably be choked off in the Senate.

Had the apathy which has characterized our legislators of the last few years prevailed with those of the Revolution, I doubt if ten votes for the republic as against monarchy could have been obtained, and we should now be politically affiliated with Europe and the "rest of mankind."

We arraign our national financiers before the country on the following charges, and claim that these charges have been substantiated on the preceding pages:

1st. They have, by abridgment of the quantity of our currency, hindered exchanges and diminished production, as a deficiency of water would prevent navigation and stop mill-wheels.

2d. They have caused the cost of the use of money to be so high as to almost stop production.

3d. They have robbed the poor man of his earnings by the excess he was forced to pay by legalized monopolies for use of money over the value of such money to him in aiding his industry.

4th. They have retarded education by forcing children to work for their maintenance when they should have been in school.

5th. They have called in money issued direct to the people, and needed by them, and issued to their legalized monopolies, calling the issue indorsement.

6th. They have, to enable them to withdraw that money from the people, where it was acting in effect as a loan to the country without interest, borrowed the same at 6 per cent.

gold interest, and exempt from taxation—equal to 10 per cent. per year, and as per count 5 loaned it to their creditors at 1 per cent. per year, and called it tax.

7th. They have reduced the nation's currency to one-half that of France, and one-third that of England, rendering it possible for their created monopolies, who borrow at 1 per cent., to exact five times the rate that foreign industries have to pay.

8th. They have ruined rich men by enticing them into reckless speculation and personal extravagance, while their capital was undermined by the excess of interest which legislation had made possible over earnings of industry.

9th. They have, by restriction of needed currency, prevented internal improvements, thus making the cost of transportation of cereals to the sea-board to act as a tariff against commerce between the States, at a heavy cost to the producer in favor of his foreign competitor.

10th. They have crushed ship-building, in which we once excelled the rest of the world.

11th. They have thrown our carrying trade into the hands of the foreigner, sending the rich harvests of freight money to be spent in

Europe, or loaned to us at double the rates our labor can earn for it.

12th. They have nurtured the foreign monopoly of freighting by keeping ours in abeyance, resulting in an advance to two and a half times former rates—and in gold at that—thus increasing the cost of our products in foreign markets, and diminishing earnings of our producers.

13th. They co-operate with our ancient enemy, England. *She*, by her Confederate cruisers, annihilated our merchant marine, and *they* make it impossible for us to replace it.

14th. They have prostrated us as a naval power, as an *efficient* navy never can exist without a merchant marine as a "nursery for seamen" as a precedent condition.

15th. They have changed our educated and intelligent young men into Wall Street gamblers.

16th. They were the prime cause of the Credit Mobilier and back-pay scandal, and the general demoralization of money men of the nation.

17th. They have given us in Europe the character of a nation of swindlers and black-legs.

18th. They have transformed the temple of our liberties into a den of thieves.*

THE PENNSYLVANIA RAILROAD.

HAVING no fear of belligerent Grangers or railway monopolists before our eyes, but being equally interested in the development of every material interest of our whole country, we proceed to describe, for the information of our readers, a great and most useful public work, which is the just pride of the State through whose wise foresight and well-directed enterprise the Pennsylvania Railway and its connections have been constructed and so successfully operated. Were other roads as well built and as well managed as this, there would be few accidents, and less cause for complaint on the part of the people. When on a recent railway tour through the West, extending through Kansas into Colorado, and beyond the Rocky Mountains, we took occasion to inquire of conductors, engineers, and superintendents, whence they came to the West? One replied, "I am a graduate of the Pennsylvania Railroad," and said it with real pride, considering it the best school of its kind in America. And we also found that railway

proprietors of new roads in the West considered it a sufficient recommendation for employment if one could claim a former and satisfactory connection with the Pennsylvania Railroad. All this has a meaning; and we infer that the best discipline is exercised in all departments of that concern; that wise and honest men are at the head of its affairs; that the public are satisfied with the accommodations which it affords; that, in short, it is a model which it would be well for other railways to consider or copy. Here is a statement which we believe to be as true as it is terse and interesting.

When an American refers to the enterprise and energy of his countrymen, he usually mentions the great railways which have been constructed during the past twenty years, and to the immediate development which has attended their construction.

Among our railways none is more strik-

* This valuable series of articles on national finance may be obtained in the form of a neatly printed pamphlet at the office of this JOURNAL. Price, 15 cents.

ingly conspicuous than that known by the above name. The youngest of the great trunk lines connecting the Atlantic seaboard with the Mississippi Valley, it has, in magnitude, outstripped them all; and after an existence of less than twenty years, it stands confessedly at the head of railroad enterprises in the world. But not alone in magnitude has it grown. All the appliances of comfort and safety to the traveling public have developed with it; all the requirements of traffic have received its fostering care; and it is no exaggeration to say that, in excellence of construction and equipment, in capacity for business, and in economical administration, it is the model highway of the United States.

When this road was commenced, in 1846, it was by many financiers considered problematical whether it could be completed. North and south of it were finished railroads, which then absorbed the carrying trade of the country. The route it had to traverse was, by able engineers, pronounced impracticable; and the State which chartered it was so burdened with debt by the construction of similar public works that its credit was seriously impaired at home and abroad. A few resolute men—mainly Philadelphians—were determined to construct it, and they went earnestly to work. By small individual subscriptions it was commenced, and by liberal municipal aid it was carried on—paying honestly for all work done, and doing that work thoroughly—and in six years the line was completed between Philadelphia and Pittsburg. It was then a single-track line of two hundred and fifty miles in length, pieced out on its eastern end by two other roads. The sagacity which has always characterized its management then became perceptible. Instead of resting upon the laurels already gained, this management began to prepare for a future of greatness. The roads completing its line were absorbed, a double track was laid throughout, connecting lines in the West were encouraged and aided, extensive workshops were erected, improved machinery and material introduced, and thus progressing, without embarrassment to its stockholders or injury to any of its creditors, it grew to its present magnitude.

A few figures will serve to illustrate its present condition. It now owns and operates

fifteen hundred and thirty miles of road, and controls in its interest four thousand miles more. It employs upon its own lines, between New York and Pittsburg, near one thousand locomotives, and fifteen thousand cars of all kinds. Its workshops cover more than five hundred acres, and employ thousands of skilled mechanics. Its trains ran, in 1872, an aggregate of 13,380,957 miles, carrying 5,250,393 passengers, and 7,844,779 tons of freight. It earned during that year \$22,012,525, and paid \$4,711,497 in dividends to its stockholders. Its ticket offices can be found in every city in the Union; its through trains leave and arrive at New York, Philadelphia, Baltimore, Washington, Pittsburg, Cleveland, Erie, Buffalo, Chicago, St. Louis, Cincinnati, and Louisville, and it has established a ferry across the Atlantic, so that its tickets are now available from London to San Francisco.

At the close of the last year the capital stock of the company was \$53,271,937. The amount of capital has been increased, from time to time, as the growth of the road required, and by law it can be enlarged to seventy-one millions. A portion of the increase authorized has been made during the past year, but what the aggregate of capital is now can not be known until the close of the fiscal year. In proportion to its extent and business, the liabilities of the Pennsylvania Railroad Company will compare favorably with those of any similar corporation, and its credit in the money centers of the world is unsurpassed. It has never paid dividends of less than six per cent., and for six years of the last ten it has declared ten per cent. This it has done while making important and expensive improvements.

If perfection in railroading is attainable, the Pennsylvania Railroad Company will one day reach it. Whatever is proved to be good it adopts, and whatever there is a prospect of making useful it thoroughly tries. Fully six hundred miles of steel rails have been laid by it, because they have proved to be the safest and cheapest in the end. The Westinghouse air-brake is attached to all the passenger trains, because by its use the utmost security is guaranteed to the traveler. Its tracks are always stone-ballasted, because

comfort and economy are both gained by the process. Iron and stone bridges alone are built upon its lines, because they will neither decay nor burn. Track-tanks are used to water the engines, because they save time. Block-signals are introduced, because they render accidents rare, if not altogether avoidable. Now that business and safety demand it, two additional tracks are being laid on the main line, so as to separate the passenger travel entirely from the freight traffic. A railroad company which can and will do all this, and in addition compels its employes to be civil and accommodating to travelers, is an institution of which every American has a right to be proud.

[These things being true, is it surprising that the owners of the Pennsylvania Railroad seek to establish an independent all-rail line from Halifax to San Francisco? So far, every new combination, instead of proving an objectionable monopoly, has been made in the interest of the public. When possible, rates have been lessened in the interest of the people, instead of being increased in the interest of the company. Broad and liberal minded statesmen, and not narrow-minded men, are at the head of this great work; and instead of being operated, as we believe, by a selfish clique, for a merely local interest, or a private corporation, it is rather worked for the good of the whole country.]

THE LATE NICHOLAS P. TRIST.

MR. TRIST had a large, well-balanced brain, and a very active mind. In person he was tall and of symmetrical proportion, standing about six feet high, and of noble bearing.

Indeed, he was an exceptionally handsome man. In his habits he was thoroughly temperate, and his full, bright, dark eye, his soft, white or peachy skin, gave him an expression at once beautiful and attractive.

His sense of honor and his integrity were of the highest type. His intellect was clear, keen, and comprehensive. His judgment of

men was generally excellent, save when charity or sympathy attained the ascendancy, and they led him to count others *better* than they really were. He was a man of method, and was neat, tidy, and tasteful in all things. He was ingenuous, and appreciated new inventions, improvements, machinery, etc. In re-

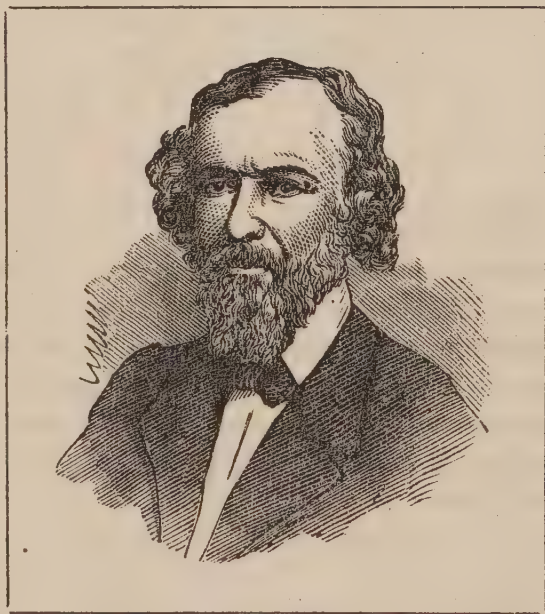
ligion he was liberal, and in measures looking to the development of our nation and the race, he was committed to the principles of "progress and improvement." Our portrait

is from a likeness taken when about sixty.

In the death of Mr. Trist we lose a conspicuous character—a sort of landmark, connecting the past with the present, and a kindly, scholarly, Christian gentleman. May his useful life, his temperate habits, his honest character be ever remembered to encourage others in right living, that their days, like his, may be

long in the land, and full of honors.

Nicholas Philip Trist was born at Charlottesville, Va., June 2, 1800. When he was about three years old his father removed to Louisiana, where Mr. Jefferson, then President of the United States, appointed him Collector of the port of New Orleans; this



appointment was not long enjoyed, as he died of yellow fever at the early age of twenty-eight. Mr. Trist, by the advice of President Monroe, who was an intimate friend of Mr. Trist's grandmother, entered West Point at the age of eighteen. After a course of training at the Academy, he married a daughter of Thomas Mann Randolph, and granddaughter of Thomas Jefferson, under whom he read law at Monticello, having given up arms. A government clerkship was offered him by Mr. Clay. He accepted it, and went to Washington in 1828. There he remained until Gen. Jackson, in 1834, tendered to him the Consulship of Havana, which had become vacant. To Havana he went, and assumed the important duties of the station, giving entire satisfaction to Gen. Jackson. Early in Mr. Tyler's administration, Mr. Trist was removed from office through the agency of Mr. Webster, although the President had given assurance to friends that he should retain his place. The ex-Consul retired to a small farm in Cuba, where he lived until 1845, when he returned to the United States, and found that Mr. Buchanan was making inquiries with respect to his whereabouts for the purpose of offering him the position of Assistant Secretary of State. In the Spring of 1847, during the activity of the war between Mexico and

the United States, the President and Mr. Buchanan urged upon Mr. Trist's acceptance a mission to that country for the negotiation of a treaty of peace, he being, they thought, particularly qualified. Reluctantly he yielded to their solicitations, and went to Mexico, where he succeeded in effecting the treaty known as the treaty of "Guadalupe Hidalgo," which was duly ratified by the Senate of the United States, and by which New Mexico and California were ceded to our Government.

During Mr. Trist's sojourn in Mexico, a warm friendship was formed between General Scott and himself, as also with Generals Lee and Persifer F. Smith, which continued unchanged through life. For several years after this international service he resided in Philadelphia, and then finally removed to Alexandria, Va. President Grant gave him the appointment of postmaster of that city, which position he held to the time of his death.

Mr. Trist was widely known and as highly esteemed. Many a household, both North and South, share to-day the sorrow of the bereaved family. Many a needy and unfortunate one to whom he has shown the tenderest pity, will feel his death as a personal bereavement, and even those who differed from him in opinion, will apply to him, in its noblest sense, the name of "gentleman."

THE FRENCH CANADIANS.

IN comparing the early history of Canada with that of other foreign dependencies of her Britannic Majesty, its children can not but be proud to know that its first European settlers were, not like those of Australia or New South Wales, lawless desperadoes or hardened criminals, sent there to expiate, in dreary exile, a life of crime, but they were the chivalrous nobles, the brave soldiers, and the devoted missionaries of sunny France. For, though long since transferred to English rule, Canada is essentially a child of France. To Jacques Cartier, her heroic son, belongs the glory of its discovery, in 1535.

The *fleur de lys* and cross were first placed on Mont Royal; the flag of France long waved triumphantly from the citadel at Quebec, and the blood of her martyred missionaries baptized and consecrated the soil of Canada.

To convert the savage red men of the forest to the Christian faith was the zealous desire of

the clergy and nobles of France, and nowhere do we read of more strenuous and self-sacrificing exertions to accomplish that object.

To the French belong the struggles and triumphs of the first pioneers, the subjugation of the natives by a kind, conciliating policy or determined bravery. They were the first who cultivated its fields, founded its cities, and established its commerce, and their beautiful religious edifices are still its pride.

When, in 1759, after many doubtful conflicts, Quebec was taken and Canada transferred to England, the name of the victorious Wolfe was repeated in every English home with feelings of joy and pride, commingled with sorrow for his untimely fate, and his memory is still dear to every English heart. But in the saddened homes of Canada the name of the brave Montcalm was murmured in tears by her dark-eyed children. Upon being told that he was mortally wounded, he had calmly said, "I am glad;

for then I shall not live to see the surrender of Quebec." Endowed with all a Frenchman's love of glory, he had fought with honor and success in various European campaigns, and in this, the hour of defeat and shame, what could the true soldier, the proud commander, ask for—but to die?

Though unlike their Arcadian countrymen, the French Canadians were not driven forth into exile, weary and heart-broken,

"To seek of the earth but a grave,"

nor treated with undue rigor, yet for a time there was open discontent and rebellious outbreaks, and even now, though peace and harmony prevail, still the Frenchman looks with longing eyes to *la Belle France*, and loves to recount her legends and talk of Napoleon's deeds of valor.

Now, constituting about three-fourths of the population of Canada East, and totally distinct from their English neighbors in language, religion, character, and customs, they can not but form an important class. They are principally Roman Catholics, and nowhere in North America is priestcraft so dominant. Although their church policy and the influence which they bring to bear upon political matters would provoke a smile, yet it can not be denied but that, socially and morally, its effects are beneficial upon a somewhat volatile people; and among none other are the clergy more revered and beloved. The village children run to meet *Monsieur le Curé* with their offerings of flowers; he is the father's friend, the mother's adviser, and the maiden's guide.

In the construction and adornment of their churches all the national love of the artistic and beautiful finds a response. The French cathedral of Montreal is the largest, if not also the most beautiful, on the continent of America. And there, before its altar, from early dawn to the twilight hour, groups of earnest devotees may be seen kneeling—the noble lady and the poor laborer side by side. It may be observed in passing through even the poorer French villages that their churches are ever pretty and tasteful—often even elegant. Superstition and emotion enter largely into the religion of the French Canadians. The scions of a country noted from of old for its literature, universities, and libraries, and yet, taking them in general, they can not be said to pay much attention, among the lower classes, at least, to education. It is true that there is no lack of universities and colleges, and there are numerous convents where, presided over by nuns, the mental training is said to be so thorough, the feminine ac-

quirements and accomplishments so carefully attended to, that many Protestant parents are induced to send their children; but even there religious instruction is made the principal element, and enters most largely into the more humble course of the village school. The French *paysan* can not be termed intelligent, and is not generally fond of reading.

While fond of novelty in their life, yet, adhering to the customs and modes of their forefathers, they do not readily adopt new improvements, and there is a quaint, old-fashioned look about their villages and their homes. Rip Van Winkle, had he only dwelt among them, might have awoke from his long sleep and felt quite at home at once.

In business, though perhaps as enterprising, they are not as persevering or cautious as their Scotch or English neighbors. In agriculture they do not take a high rank, but as mechanics they are said to excel; while of the skill, suavity, and kindness of their professional men who has not heard? Many of their young men resort to the States in search of employment, while others engage, during the winter months, at least, in the lumber trade of the Ottawa and St. Lawrence. In vain might we look elsewhere for a people who more literally obey the injunction of the Gospel: "Take no thought of to-morrow;" "Sufficient unto the day is the evil thereof;" for they ever seem to be gay and happy; disasters do not crush them, nor sorrows overwhelm them; they possess a buoyancy which preserves them from sinking. Fond of social life, delighting in the joyous song and merry dance, affectionate and kind, the home-life of the French Canadians is by no means a gloomy one.

They are, in general, of medium height, spare rather than otherwise, and of a nervous, excitable temperament, with large perceptive, but somewhat smaller reflective, faculties, black or brown eyes and dark complexion, although blue-eyed and fair-complexioned people are not rare among them. Their emotional, expressive faces, sparkling eyes, Grecian noses, and finely-formed mouths render their personal appearance somewhat attractive, while even the poorest peasant possesses an indescribable charm, a grace of manner for which even the polished of other nations might sigh in vain. They are affectionate, but fickle; feel quickly, but not strongly; are easily irritated, but not malicious; with more spirit than solidity, and more vanity than pride. In short, such as are the people of France, so are the Canadians, with the various modifications which intercourse with other nations and change of climate and country could not fail to produce.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall !
Thou art the nurse of virtue.

PSYCHOLOGY OF THE SEXES.

WE would call attention to an article under the above caption, by Herbert Spencer, and published in the November number of *The Popular Science Monthly*. It is not our purpose to denounce it wholly because a single line of error is discovered in the woof or warp of his reasoning; but because that line, running the entire length, is so very like an attenuated thread of glass lying beside another equal thread, that the careless observer is liable to imagine that the two are one coarser thread. The writer has shown so much of truth in certain directions respecting the sexes, that his inferences are sure to be fully accepted by the many of his own sex.

He sets out with the assertion: "Women, as well as men, are units in a society, and tend by their natures to give that society certain traits of structure and action. Hence, the question, Are the mental natures of men and women the same? is an important one to the sociologist. If they are, an increase of feminine influence is not likely to affect the social type in a marked way. If they are not, the social type will inevitably be changed by increase of feminine influence." He answers the important question thus: "That men and women are mentally alike, is as untrue as that they are alike bodily." To which womanly women, masculine women, and feminine men, respond with an echo. Or, if desired, they can assert an originality of that identical opinion in their respective mentalities, and thus, to themselves, at least, evidence the energy of a feminine unit.

The "increase of influence" will be referred to in connection with, or in opposition to, further ideas advanced by him. In his marginal notes he says: "Instead of comparing either the average of women with the average of men, or the *élite* of women with the *élite* of men, the common course is to compare the *élite* of woman with the average of men." This is partially true and partially untrue. Where it is true, there are justifications. For when he says "There are feelings which, under our predatory régime, with its adapted standard of

propriety, it is not considered * manly to show, but which, contrariwise, are considered admirable in women"—then draws the inference—"Hence, repressed manifestations in the one case and exaggerated manifestations in the other, leading to mistaken estimates;" thus thoughtlessly representing only a single side of "repression" and "exaggeration." We do not much object to that which he says; but that which he leaves for others to say, or leaves unsaid, is quite as important, if truth is to be reached. Since notes are used, why leave the opposing half un-intimated? Why not reverse the figure, and show that, "under our predatory régime," there are feelings which it is prohibited for women to express, but which are considered admirable for men? We should then find ourselves furnished with a social equilibrium of "repressed" and exaggerated manifestations; and both sexes might discover therefrom their mistaken estimates of each other. We should see the justice of comparing the *élite* with the average, acknowledging that "repressed manifestations" should balance the scale of merit in woman's favor quite as impartially as in man's favor. A host of grievances on either side might be caused to vanish. Only man knows how much the nature of woman is "repressed" and "exaggerated" by false estimates acted upon; but woman's *faith*, and, consequently, her *survival*, is founded upon those subtler energies that constitute feminine wonders—energies that have not been, and can not be, suppressed by the more visible, mental strength, associated with masculine proportions.

Further along, in his notes, he writes: "In comparing the intellectual powers of men and women no proper distinction is made between receptive and originaive faculty." Of this, directly or indirectly, in another place. In the ground-work, he goes on to say, in citation of the physical differences between man and woman, that "throughout their lives, especially

* We would like to ask whose consideration is authorized?

during the child-bearing age, women exhale smaller quantities of carbonic acid, relatively to their weights, than men do; showing that the evolution of energy is relatively less as well as absolutely less." Now we would take this consideration, if it is an argument as he uses it, back to the beginning of his chapter, where his fears of "increase of female influence" are exercising his self-protective caution so considerably. But he makes quite another and opposite use of the scientific item. He continues: "This rather earlier cessation of individual evolution (during the child-bearing age) thus necessitated, showing itself in a rather smaller growth of the nervo-muscular system, so that both the limbs which act and the brain which makes them act are somewhat less, has two results on the mind. The mental manifestations have somewhat less of general power or massiveness; and beyond this there is a perceptible falling short in those two faculties, intellectual and emotional, which are the latest products of human evolution—the power of abstract reasoning and that most abstract of the emotions—the sentiment of justice—the sentiment which regulates conduct irrespective of personal attachments, and the likes and dislikes felt for individuals." Since, by this abstract reason, and this abstract emotion of justice, men regulate conduct irrespective of "attachments," "likes and dislikes," how is it possible that the instinctive, non-reasoning faculties of woman may acquire an evolution sufficiently energetic to influence these massive justice-workers out of their reason, their regulative emotions, or their physical strength—so that their supremacy shall be less effectual for good? Something superior to that abstract justice *must* be produced to effect the mentioned change; something more adaptable to the times and their conditions, than that abstract reason must be furnished ere society shall be deterioratingly swayed to and fro by the airy, frivolous impulses implied to woman's structure. And Spencer would say, it takes a great deal of nothing to make a something. Scientists have, so far, agreed, in summary of their explorations, that "justice" is one of the rudimentary combinational forces of scientific order; and if a masculine sphere rotates by a strict regularity of rule corresponding, or identical with pure reason, unmixed and unswerved by emotion, excepting an emotion that regulates—we are totally at loss to obtain a clue to the means whereby preponderate masculine intelligence shall be decoyed from its uniformity, unless there is some powerful fem-

inine attribute, not yet admitted to recognition or localization. And, as man has been called upon by evolution to furnish these "latest products" of "reason" and "justice," there is a plausible, probable, aye, certain knowledge that woman is held responsible to society for her presence; and that she can absolve her obligations only by furnishing a production, equivalent to the time and space which she occupies in the sociological world; *and all men acknowledge that no mean product will pay the debt.* Reason has but recently recognized its "whereabouts" or its expansive qualities; why not suppose it possible that some feminine energy lurks on the outskirts and in the hidden nooks of this social globe, waiting to be positively called and made familiar with its masculine evolutionary realities, and rendered potential by the courtesy of acknowledgment? That something is amiss with our social knowledge is absolutely certain. It is the self-avowal of all women, whether strong-minded or otherwise, that their natures are not appreciated by sound understanding; and it is also felt by them that they do not understand themselves, since they have been accused of so much folly and littleness, yet desire to be so much more useful and more consistently balanced in their individual as well as their social sphere. But this self-ignorance, or strangeness to self, extends the length and breadth of humanity, inclusive of all. And, invariably, we find that those who profess to know the least of themselves, know more than those who are sufficiently shallow to appear transparent to themselves.

But let us follow the writer further. He resumes: "After this quantitative mental distinction, which becomes incidentally qualitative by telling most upon the most recent and most complex faculties, there come the qualitative mental distinctions consequent on the relations of men and women to their children and to one another. Though the parental instinct, which, considered in its essential nature, is a love of the helpless, is common to the two, yet it is obviously not identical in the two. That the particular form of it which responds to infantine helplessness is more dominant in women than in men, can not be questioned. In man the instinct is not habitually excited by the very helpless, but has a more generalized relation to all the relatively weak who are dependent upon him." We quote this in order, but let us follow him on, and after he disposes of other ideas according to his pre-natal mental bearing on the general question, he will

off-set woman's love for the helpless with another characteristic love; and if we mistake not, the blending of the two "loves" will show some consistent and sensible medium between them. Following in order, he says: "The remaining qualitative distinctions between minds of men and women are those which have grown out of their mental relation as stronger and weaker. If we trace the genesis of human character, by considering the conditions of existence through which the human race passed in early barbaric times and during civilization, we shall see that the weaker sex has naturally acquired certain mental traits by its dealings with the stronger. Necessarily, then, the women of the conquering races, having to deal with brutal men, prospered in proportion as they possessed, or acquired, fit adjustments of nature." Now, these glimpses of history are taken with the eyes of a man. With a pre-supposed and popular idea that woman is the fragile vine, while man represents the sturdy oak, the writer racks and rummages his brain to ascertain how woman holds her own. He strikingly presents the idea of "fit adjustments of nature" in such a manner as to lead one to suppose that *man* is nature itself, total and entire; and woman a miracle, brought in from nowhere, by accident. Mankind being too busy in his own laudation to put her out beyond the gates of his temple, tells her she can remain if she adjusts her nature in the future so as not to interfere with his self-devotion. Remarkable justice! and very superior intelligence! considering that he was born of woman, and values life! Thus, what she has acquired by dealings with man is forthcoming, we suppose, and, of course, *manly*. Nevertheless, he condemns us all the same as if it were original with us. "We may set down," he says, "first, the ability to please, and the concomitant love of approbation. Clearly, other things equal, among women living at the mercy of men, those who succeeded most in pleasing would be the most likely to survive and leave posterity." Now the "ability to please" is no mean ability. From the very fundament of charity or love arises this disposition and ability. To please, is not to *be pleased*, in a direct sense; although, indirectly, that is emphatically the result of the primal act. For, when the individual is so physically and mentally constituted as to desire, and to make, others happy, he is, by usage, nourishing and strengthening his own leading or vital traits of being; and, con-

sequently, is keeping his interior or individual law harmonized with all law, and thus is he kept whole and enduring. Therefore, woman is wise—*receptively if not originally*; and her wisdom extends to other elements of disposition or character, for she exhibits no jealousy, but shows a ready concurrence of good, earnest will—as she proves by immediate adjustment to that law of pleasing. But this "concomitant love of approbation" so characteristic of women, as he implies—what is it but the naturally desired answer to her experiment or effort? Without this demand of answer to inquiry (and evolution is inquiry), she would be as unconcernedly tractable an animal as the horse, that keeps automatic tread-mill step to the tune of the "saw." Is that desirable? We hope not.

Still further on, he says: "And (recognizing the predominant descent of qualities on the same side) this, acting on successive generations, tended to establish, as a feminine trait, a special solicitude to be approved, and an aptitude of manner to this end." Wherefore a feminine trait, exclusively? And as a motivity to action, why feminine? Take every class of men, from the wild hunter, who slays the harmless and ferocious beast, who suspends from his belt the bloody scalp—to the *theologic* scientist, who must know the nature of the least, that he may have comprehensive knowledge and control of the vast whole, or to the *scientific* theologian, who labors to make all mankind revolve around his studied principles, and his God—*knowable or unknowable*—and what, indeed, is the chief aim of any but that he may do his own will, both aided and unaided, in all cases supposing that his own enacted will will promote his own furtherance and felicity, and, consequently, *what seems to him*, the furtherance of all created and creating. When a man goes out in the morning to his worldly duties, and finds that his darling hope is blossomed, he rejoices; he carries the sight of that blossom with him into his dingy office, or through streets where squalor and filth are prominent; yet all things seem glorified in the roseate hues of that morning joy. But the ragged children, the discouraged, poverty-stricken, hard-faced dwellers of these tumble-down tenements have no intimation or intuition of a new-born blessing. The world is all the same to them, or worse than yesterday. His joy may be their woe. He never thinks of that. If he did, it would move him to instant self-defense. How keenly the arrow cuts when they say he

has blockaded their highway of happiness that he may collect toll at his own gates of "Paradise!" And yet this is always true, directly or indirectly. Such is the blind selfishness of mankind. And what a self-satisfied thrill electrifies his senses if they cry "God bless you!" for a single kindness rendered them, even though their labor has furnished meat and drink to keep him alive, and luxuries to make him cultured. Or, with what peculiar boasting he silently arrays his gathered trophies of renown in such a manner that one will advertise the other by contrast! Verily, none are so jealous of approbation and approbation as those who possess and covet. None discover qualities more quickly than those who know them by experience.

The next idea seems like an atheistic unfaith. And it is unexpected—proceeding from the theistic reason of Spencer. It is this: "Similarly, the wives of merciless savages must, other things equal, have prospered *in proportion to their powers of disguising their feelings.*" The italics are ours. Until this article, we had supposed that Spencer had an innate faith in an overruling and in-working power of good, that lives by true expression, and that expresses through facts. None should know better than he that "feeling" has a potency that can be verified *through* the film of disguise. Fact is "lively," and survives. Disguise is shadow; it lives, and dies—*subjective*.

Concluding his statement: "Women who betrayed the state of antagonism produced in them by ill-treatment, would be less likely to survive and leave offspring than those who concealed their antagonism; and hence, by inheritance and selection, a growth of this trait proportionate to the requirement." Passing quickly over his very significant oversight and omission of the direct predominance of affection, over petty antagonisms that sum up to "ill-treatment," we have the fact which common-sense gives us, that any usage received is not intentional exactly in kind or degree as we look upon it with surface-sight; that such as it is, it has been provoked by similar misunderstandings and unintentional misrepresentations of our own motives and movements; and not unfrequently the fires of anger and passion have been kindled by previous exterior associations, and have not had time to cool down to quiet embers. To say that these accidents or incidents, these possibilities and contingencies, do not modify everyday life, together with every link of the social

chain, is to say there are no such alternatives as cause and effect. It leaves only the methods of reason to be discussed; and "methods" will be discussed as long as humanity employs them. There is a relativity between "intuition" and "reason" that can not be abruptly severed by indivisibly small hair-lines, nor by prominent abutments. If, by analyzation, you attempt to find two degrees that represent starting-points of either reason or intuition, you will find that these two degrees bear certain relativities to those next in order on opposite sides.

Then we have another, if not atheistic, whimsical idea involved in the the "arts of persuasion" by which woman survives. He is unusually quiet when he leaves us to infer that these "arts" are things, or acts, outside of law—belonging to sorcery, perhaps. He slides quickly over the "witchery," and mentions "the ability to distinguish quickly the passing feelings of those around" and the use of it, by the wife of the savage, for protection; and he claims there has been a perpetual exercise of this power, until it has become a "feminine faculty," when it "ends simply in intuitions without assignable reasons," excepting "when, as in rare cases, there is joined with it skill in psychological analysis, there results an extremely remarkable ability to interpret the mental state of others." We would not now be surprised if he should say these "rare cases" were miraculous. And now, again, he discovers that these "specialties of mind" are common to men. "But the difference is, that whereas, in their dealings with one another, men depended on these aids in some measure, women, in their dealings with men, depended upon them wholly." Then, as he would have it, there is not a spark of "reason" in woman—nothing of her own but *pity for the helpless, admiration for the strong, love of approbation*—yes, there is the ability to please—then we come back to the negatives again; the *powers of disguising feelings, arts of persuasion, and aptitude of guessing*—right, or wrong, as luck would have it. We have italicized these to make a little appearance of character; but it is a dubious outlook.

But what have we next—a delusion? "Hence, in virtue of that partial limitation of heredity by sex, which many facts through nature show us, they have come to be more marked in women than in men." A "partial limitation of heredity by sex!" Oh, my countrywomen! what a relief is this to your uncomfortable insignificance! Since it is pos-

sible, and known, that woman may not bequeath all her follies to her sex, perhaps, where a folly is left out of the feminine character, it may not be vacancy instead, but a *bona fide* something, worth inheritance—full of “carbonic acid,” and its concomitant, self-esteem. The mere anticipation is exhilarating to our “emotions.” But these emotions are not now in order, unless they are “regulative;” and we sober down, or, rather, *up* to our promoted “somethingness.”

“One further distinctive trait in women,” he says, “springs out of the relation of the sexes as adjusted to the welfare of the race.” He refers “to the effect which the manifestations of power of every kind in men has in determining the attachments of women.” Does he mean to set this miscellaneous admiration of power in contradistinction to masculine peculiarities? Then is he all wrong; for the sight of power sets men running like wild-fire to catch it; or if there happens to be no “run” in some of them, *they* crawl through gutters and gimlet-holes—or some *stand still in their tracks a lifetime* (and is not this self-abnegation?)—sure that luck will bring this “power” round to them. Men do all things, but the right, to embrace omnipotence. Sometimes they even submit to do right—but it is a cross; and they feel as if they were stealing honors from “Him crucified.” If, as before referred to by him, a “love of the helpless” is dominant in woman, for that reason, for its equipoise, woman admires the strong and powerful. When her *indiscriminate* love is *discriminate* enough to gather in the weak and strong, the bad and good, under her blessing, she has the key to “eternal life.” Such harmony is omniscient.

He shows the extension of this admiration by the same unbalanced and partial dessication that he employs in all his disestablishments of intelligent womanhood. “With this admiration of power,” he says, “primarily having this function, there goes the admiration of power in general, which is more marked in women than in men, and shows itself both theologically and politically.” He forgets that when this admiration becomes generalized, and when woman meets not with that admiration that gratifies her approbateness, a faculty of discrimination is sure to be aroused or created as a means of self-sustenance. In continuance, he says: “That the emotion of awe aroused by contemplating whatever suggests transcendent force or capacity, which constitutes religious feeling, is strongest in women, is proved in

many ways.” As proof, he cites different nations where women are “religiously excitable;” of worshipers, “at least five-sixths, and often nine-tenths, of them are females”—of the “Sikhs, that the women believe in more gods than the men do.” Now facts, the most plain, often seem to be most obscure, of which this instance proves the certainty: Men of all nations and classes have “religions,” “gods” and “temples” as many, and as intensely clothed with superstition, as have women. They are classed under differently styled titles, as a few mentioned will illustrate: “Bacchus,” “Mammon,” and “Nature” are a very few of the very many “gods.” “Idiosyncrasies,” “manias,” “hobbies,” “eccentricities,” suggest the “convictions” that draw men into the strong and swift currents of “destiny.” “God” is another word synonymous with “good.” Religion is belief. Religious belief is faith in that which seems good and acceptable to our natures and needs, as individually felt and considered. And temples—whether they are temples of lucre, or love, or lust—are places wherein to worship, to admire, to believe, and enjoy. Neither gods, nor temples, nor religions, are confined to condition, locality, material, spirit, kind, or quantity. They are alike immergent and emergent; special and universal; and, comparatively, bad and good. As God—knowable or unknowable—is *undefined*, at least, who shall dictate that one God shall be worshiped? The individual conception of “God,” or the “Unknown,” is not identical with the minds of any two persons. Why not make gods of godly attributes? Why not many gods of many kinds when each separate conception helps to form one grand conception of Supreme Worth? One individual does not encompass all of these attributes with human intelligence; it is for the many to do, with many methods, many selections, and groups. Religion is the ingathering of multitudinous intelligent ideas, which modify and change the ideal “God” or “Good.”

And this “love of power,” that invades social, religious, and political life, is quite as subtle as the “power” itself. Our own oft-times deceiving eyes are the very best eyes we have to see with; but they do not always assist us to take correct appraisals of things and thoughts, of powers and weaknesses, that we would read aright. We do not adjust the foci so as to look inward with the same broad and thorough perception that we experience in our outward views and observation. Therefore, as

this consideration generalizes, we can not reproach that man who, witnessing a social, political, or even pious parade of men, plumed and crested, shouldered and skirted with conspicuously contrasting colors, and all surrounded or bordered with admiring faces of women and children, we can not severely reproach that man if he looks through his semi-seeing, semi-blind eyes, and sees only *a crowd of women* admiring "power" in men. If he forget that it is *man*, who is parading for "power," and "admiration," too, it is because his mind is engrossed in the criticism (favorable or unfavorable) of woman. This is why Herbert Spencer says, "And to this cause is in like manner to be ascribed the greater respect felt by women for all embodiments and symbols of authority, governmental and social." Spencer has no eyes directed to see the very wise men *adopt* symbols, and that women prize both men and their symbols.

What is money but the "symbol" of that which it buys? What is a "promise to pay" if it is not an emblem of honesty and justice? What are legal enactments of any kind? Are they morality and justice of themselves? or do they need personification? Or are morality and justice, themselves, conceivable without personification—that is, so as to be influential? The printed words on the page are typical of objects, acts, and thoughts. These shadow characters have substantial values, because they are convenient expressions, and frequently equivalents, of realities of matter; there being as many values as there are judges, they are indeterminable at fixed valuation.

We have followed the writer through the particulars of differences which he has been pleased to set forth; and that which he has to say in conclusion is not necessarily to be commented upon here, as he will have to remodel these implied and asserted results when, as a scientist, he "dredges the sea" of humanity for actual specimens of the "sea-depths." In this article he has dealt with a few visible atoms of the vast whole of character, on either side; and his conclusions are, therefore, superficial and erroneous. Wider and deeper speculation will furnish real and visible fundamentals for what now seem inconsistencies on the feminine character. The writer has heretofore agreed that whatever is could not have been otherwise, and, consequently, is right. There is a steadfastness about this doctrine that is quite as applicable to one side of the sociological question as to the other. Woman's nature is thoroughly compatible with the

nature of man, when the general laws of repulsion and gravitation are taken into consideration.

Man's life is good for naught when he is deprived, at length; of woman's society. He will give all he has, yea, his own soul—*its earth-life*—to possess that association. And why, if she breathes not that which is equivalent to his masculine reason, equity, and devotion to the true compounds of life? If, as is supposed by Spencer, as well as many others, woman is content to adhere to "symbols"—of love, benevolence, religion, power, popularity, and freedom—why withhold from her the *true gods*, for which (they say) she cares little or none? There is contradiction here, between words and words, between sentiments and sentiments, as well as between sentiments and actions of those who expatiate upon the peculiar differences of the sexes, as psychologically considered. And sociologists are barred from social truths by hereditary opinions. It can not be otherwise. One consolation offers itself. There are vigorous laws pulsating at the interior of social nature, where human ingenuity never penetrates; where human intellect disdains to seek for wisdom—laws that laugh at the inartistic, erring symbols that human legislation toys with. Nevertheless, boyhood climbs its straw ladder to a manhood that is almost as frail, in mental strength, as the fragile straw. Progression is slow. While some of the forces seem to leap forward with hurrying eagerness, occult energies have taken lateral movements. The maneuvers of the drover, and his worried herd, are adaptable illustrations. The drover gets impatient with the demoralization of the driven beasts, and demoralizes them still more in his hasty management. He has the one idea of getting the cattle shipped for market; and foreseeing one fate or destiny as common to all, he does not discern that nature (*instinct*) causes them to attempt their own salvation. What rights have they when he has a wish or a will to be fulfilled? None whatever. Their hunger, or painful weariness, does not hurt him; and so he hurries and drives. The same impatience, with slow results, is observable in the human race regarding its kindred; and one local idea domineers over its locality. One section has one prime desideratum in view, and forthwith it collects the known energies that tend to overcome that want; and while that purpose is being urged to consummation, all indifferent or unknown energies are looked upon with suspicion, disfavor, and malignancy.

But the undercurrent of national law never flags nor deviates from its positive course. The Almighty head is not diverted to forgetfulness by the presumed supremacy of a selfish, single idea. *Ultimata rule ultimata.* This present earth population is but a handful in proportion to the myriad ages of "various" life. We have just the flash of a conception of those ages that have left only "material" record upon and in the earth. The knowledge of our own age is indefinite. We are vaguely reaching out to tear away the supposed curtains that may and may not hide futurity; and we are quite uncertain what, of present associations, we may carry hence. With these considerations in view, it is not worth the while nor the effort to turn science and nature topsy-turvy unless we are willing to acknowledge that unknown as well as visible forces influence our existence.

If woman is, in the widest sense, inferior to man, then all the assertions of men, women, and angels can not alter that which is—can not make black, white. If woman's nature tends to the faculty and fulfillment of populating the earth, the artificial or reflex powers of heathendom and Christendom can not reverse nature's decision. If, by the nature of the age, she aspires to devotions that, by their tendencies, detract from population—why not accept depopulation as a necessity of the coming age; and consider the old order of things as worn out of utility for the time? Is nature

at variance with nature? Surely not; only that, in ignorance, such are our conceptions of it. We must seek for harmony in the midst of the unknown, and we shall find equipoise in both the present life and that which we call "death."

When minds turned science-ward are positively unable to convince other minds of "priority" or "simultaneity" of "matter and force;" when, in fact, individual philosophy is not reconcilable in its own extremes, it is rather premature to assert, with any appearance of certainty, that human nature, in its mental characteristics, is original in either sex, of either age; unless it were possible that some psychological sage of the earliest age of humanity—and at what period we do not know—had deigned to preserve statistics for his posterity.

Men invent "mechanical and legal contrivances" that, at first sight, seem visionary to men and women; women furnish psychological conveniences that women and men will not, for a length of time, venture to glance at. They all solicit safety by shutting their eyes against that which may possibly be unseemly or unpleasant, and—emphatically—against charge. The two social levers work their respective ways with equal progress. Humanity rushes into all kinds of inconsistencies to avoid a single inconsistency; yet both sexes live and thrive through and by these obstacles.

ROSINE KNIGHT.

HOW TO BE BEAUTIFUL IN OLD AGE.

How to be beautiful when old?

I can tell you, maiden fair—

Not by lotions, dyes, and pigments,

Not by washes for your hair.

While you're young be pure and gentle,

Keep your passions well controlled;

Walk, and work, and do your duty,

You'll be handsome when you're old.

Snow-white locks are fair as golden,

Gray as lovely as the brown;

And the smile of age more pleasant

Than a youthful beauty's frown.

'Tis the soul that shapes the features,

Fires the eye, attunes the voice;

Sweet sixteen! be these your maxims,

When you're sixty you'll rejoice!

STOLEN GLIMPSES.

I AM a mechanic, but my uncle Meanwell is a minister. These two facts may account for another—that I recite to him. My trade affords me a little leisure, some of which I improve to get lessons in studies I have a curiosity to know more about; and then I go up to the north part of the village, where the parsonage is, and go over the matter with uncle. Occasionally I find

him writing in a book, that was perhaps designed for accounts. When done, he opens the lid of the great study-desk, and places it away very carefully. One day, going out suddenly to assist a parishioner who had been thrown from a carriage, he left this rather queer-looking book upon the desk. I was seized with a strong desire to scan its contents. Trembling with eagerness, and

also with a sense of shame, in that I was about to peer into what was not designed for my eye, I opened the worn covers, and found, on the first leaves, some accounts which must have been kept by his brother, a blacksmith, another dear uncle of mine, now gone to the final rest. Further along was the pastor's hand-writing. A few glances revealed to me the uses to which he had consecrated the book, that, doubtless, the brother's widow had given to him, because there was so much blank paper. He had written herein the workings of his heart, his most conscientious convictions, rules of life, and moral judgments upon critical questions, etc. Occasionally, upon the earlier pages, were stains, where, I conjecture, tears had fallen, as he might recall his brother, to whom he was fervently attached, or feel the penetrating power of what he was inditing.

It would take too much time to tell how I got other opportunities to see these records without creating suspicion, or in any way wounding my gracious uncle's feelings. I always left this private diary just where I found it, but managed to copy not a little. To this day this pious thieving, if I may so call it, is going on. The best atonement, it seems to me, which I can make for doing what has never rested entirely easy upon my conscience, is to publish in the PHRENOLOGICAL JOURNAL what I have surreptitiously obtained. Every phrenologist who has seen uncle Meanwell has gone into ecstasy over the alleged development in his brain of the moral and intellectual faculties. He certainly has a fine-looking head, and I have heard some of his people say, who know nothing of phrenological science, that they often found themselves looking at and admiring his grand-looking head as he stood in the pulpit. What he recorded, manifestly for his own eye and heart, does him great credit, and I have an agonizing desire to appropriate and live out such sentiments. In this article I will commence where the diary does, and in the course of a few months may transcribe enough for specimens, at least.

SELECTIONS.

Dec. 1, 1865.—How foolish is the man who barter away reputation for indulgence.

Jan. 24, 1866.—How foolish to tamper

with that which he does not know, and which is dangerous, perilous, when there is enough to engage him which he does know, and which is reputable, useful, and every way, and to all, profitable.

[These go to show, I suppose, that he has considerable prudence as well as Causality and conscience.]

July 12, 1866.—I am resolved never to speak or do anything that may need apology or cause regret.

[Noble. Firmness comes out in this.]

July 19, 1866.—When a man makes a speech, he can save his dignity if he is not entertaining.

[Would one see here a manifestation of Self-Esteem and Approbativeness?]

I will only eat for my nourishment.

July 20, 1866.—It pays for the pains to be graceful, if one can be, and on all occasions.

[Ideality?]

Why should one allow himself to be "stirred up?"—why?

[Ministers have more trials than most people know of, especially when they advocate what is unpopular, as my uncle often does.]

Sept. 5, 1866.—If one is slighted, he had better "let it pass." He should not let a "cold" one destroy his sociability with the rest of the company.

[My uncle is a man of lively social feelings.]

A man, save in cases where it would create unjustifiable prejudice, should act from his own standard of manners. In these things lie high discipline and high achievement.

Sept. 8, 1866.—Strange that people who have, should sometimes so readily risk reputation, peace, health, means. Not so strange, though, if we reflect upon what people allow themselves to *think*, or how they allow themselves to be moved by circumstances perhaps trifling. *Fixed principles. Settled rules of prudence.*

[I do not alter a word or mark. I simply transcribe the rough, or abrupt, in his own brief, deep style, as I find it in the diary. He can be easy and flowing, or so his friends think.]

If there be a difficulty, misunderstanding, offense, one should not be hasty, but approach it candidly, with consideration, with suavity.

March 25, 1867.—G.'s philosophy was: Put

no confidence in any one; all go for interest. But if I see good—very well.

M. is too confiding, frank, enthusiastic. Thought and plans to himself.

Policy may be put to a good use by a good man.

People sometimes worry, bore and impale themselves. Keep balanced, natural, free, self-preserving.

Temper takes people through a fever. Keep cool. Say and do nothing you would not advise another, admire in another. Think of the Lord Jesus. Temper is a dreary element. Control it. To the congregation, painful.

Nov. 9, 1867.—I am forty-six to-night. Well. Thankful to God. Resolved.

PUBLIC SPEAKING.

1. Look should be, in best sense, pleasing.

2. Stand well and firmly. 3. Speak the words. 4. Emphasize. 5. Modulate. 6. Give the tones. 7. Plan not to be too long, nor to be hurried. 8. *Deliver* it, *render* it. 9. Abandon yourself entirely to speaking, without a side thought. Less spoken well better than more spoken poorly. Essentially declaim. Use the mouth and all the organs of speech freely, openly, limberly. Distinctness, time, make the deaf hear, rather than roaring. Let not the voice lazily die out at the end of the sentence. Who does not want to hear the last word as well as the first?

[So it seems that my uncle Meanwell, who always preaches and lectures as if he could do but one way, and had never thought of that way, has really made it a matter of study.]

More next month.

NEPHEW.

THE LATE JAMES PARKER,

THE POPULAR RAILWAY CONDUCTOR.

THOSE are comely and attractive features. Notice the chin; it is a prominent feature, and indicates a large cerebellum, with strong social affections. The well-cut mouth and full lips confirm this inference. The nose is also a striking feature, evincing culture and good mental development. The eyes are also prominent, indicating Language of a high order; practice would have made him a fluent, efficient speaker. The intellect is ample in development; he possessed ability to acquire knowledge easily, and to apply it readily. The top-head is full enough to indicate a disposition at once kind, respectful, hopeful, trusting, believing, honest, dignified, aspiring, and decided. He possessed most of the elements which give one popularity and good citizenship. It was not in his nature to wrong another intentionally. If his ways in some respects—socially—were not our ways; if he transgressed in the direction of ardent affection, let us judge him as we ourselves would be judged, with lenity, and not Pharisee-like, claim to be free from all fault.

Had this man been liberally educated, he could have become an ornament in one of the professions—say that of the law. Or, had he preferred literature, in that.

There is a happy blending of the temperamental conditions and of phrenological faculties in this organization.

The New England journals have published commemorative sketches of Mr. Parker, and the following, from a Springfield newspaper, is fairly indicative of their general tenor:

Mr. James Parker was a man both widely known and esteemed, especially among the business and traveling public, whom for a generation he had accompanied back and forth on the railroad between this city and Worcester as conductor of a passenger train. His public work was almost summed up in that service, and the story of his life's details is brief. A native of Hollis, N. H., he became—what Chester W. Chapin, Ginery Twitchell, and so many of our most noted railroad managers were—a stage-driver, in his very boyhood, and in that capacity labored and was liked on various routes in Southern Vermont and New Hampshire and the northern part of Worcester County. When he was wanted for his permanent vocation, he was agent in Worcester for various lines of country stages, at the fresh, ambitious age of 23 years. This was in the spring of 1839, when the railroad was being extended from Worcester to Springfield; Mr. Parker accepted

the offer of Gen. James Barnes, the then superintendent, and on the first day of October, in that year, conducted from Worcester hither the first railway passenger train ever entering this city. Mr. Wilson Eddy, the present master-mechanic of the Boston and Albany road, was engineer; Mr. James E. Russell, the present county register of deeds, then a mere boy, was employed thereon; and the passengers included Superintendent Barnes, the directors of the new railroad, and others. This proved the beginning of a service of rare continuance and honor, lasting unbroken and unblemished on the part of the corporation and their servant for thirty years. From first to last he was conductor of the regular morning train for the east and evening train return, serving between Worcester and this city only, until the consolidation of the roads, and then between this city and Boston; and making himself not merely the familiar and kindly acquaintance of all, but the warm and trusted friend of many. Four years ago he resigned his position as conductor, partly out of regard for his health, but chiefly to accept the important duties of superintendent of the drawing-room and sleeping-cars running between Boston and New York. These cars, be it remembered, are run by independent companies, the railroads over which they pass receiving a specific percentage of their earnings, divided pro rata; and the constant details of repairing, furnishing, officering, and managing require the closest and most discriminating care. The railroads and the car companies found in Mr. Parker the most conscientious of servants, and the public found him in the new place, as in the old, a thoughtful provider for their wants. Last year, when the New York and Boston fast express line was

constituted, Mr. Parker was appointed its superintendent likewise. It is no wonder that so popular a man should have been speedily offered public office so soon as his daily avocations left him free to accept it. Mr. Parker, as long as there was a Whig party, was a Whig of the straightest sect, loyal to the letter of the Constitution, never turning to what he judged the heresy of free-soil, and an enthusiastic admirer, as he was a personal friend, of Daniel Webster. He has been, since the disruption of the party of his youth, a Democrat, as far as he took any active part in politics, and received such distinction in that line as he has been able to accept from the hands of the Democratic

party. As a Democrat he was chosen as representative to the State Legislature from the "double district" in this city, two years ago; and, last fall, he was again elected to that position, in the Legislature of 1874. His character was upright and trustworthy; he was distinguished always by the entire esteem of his fellows; in business he was capable, and in society courteous. He had refined tastes, and a strong penchant for the collection of the rare and curious in literary, historic, and



other directions. He was a notable bibliophile; and his library contains many choice editions, and costly works on specialties. Few men are so well versed in numismatology as he, and his cabinet of coin is almost invaluable; he also made important collections of autographs, newspapers, and of various tables, charts, bills, etc., such collections, in fine, as are of great value in the illustration of history, and eventually serve that purpose. Mr. Parker was twice married, his second wife, who survives him, being the sister of his first, and both the daughters of the late Amasa Parsons, a venerable character

of a former generation, on whose homestead stands Mr. Parker's residence. He leaves but one child, a girl, and one brother, Mr. William Parker, of Boston, who was with him through a great part of his illness.

MY IMPRESSIONS OF NAMES.

"What's in a name?"—*Shakspeare.*

EVERY mother names her children with a sort of prophetic feeling, hoping that they will grow up, in character or person, like the one after whom they are named, whether it be the venerated father or noble statesman. With this view, I will assume that traits of character are found in names, as though the genii of names presided over the owners, and followed them after their christenings. It is with the most familiar ones that I shall deal mainly, so the reader can be the judge whether there is anything in the fate or fortune of his fellow-acquaintances as associated with their names.

William—I never could see, for the life of me, why William is so often the first-born. Sometimes I think it comes so handy to say "Willie," and there is something so sweet and tender about it, too. The young couple, feeling so loving and thankful for this boy, fall into just the mood to coo "Willie;" so Willie it is, and he grows up a good-natured, frolicsome, easy man, making a good companion for some woman, although he may not set the river a-fire or get to be a ruler very often. George finds a way into every family, almost, and there is something good and noble in this name also. He is the boy to throw sticks on the barn, teases the cat, breaks your thread, and laughs you good-natured when he sees he has gone too far. Somehow he does seem "possessed;" but he is the victim of circumstances. Like the Father of his Country, he wants to stand at the head of something, if it is only his own shop or family. If I was longing for a flirtation, and did not want any hearts broken, I would choose George.

James comes up in every neighborhood, and he has to work hard if he gains a name—he that is named James. The first one that tells that "Jim" has turned out somebody, sets everybody agog, and has to work hard to be believed. But he does get to be

a target, sometimes. No one expects much of the John's. His good mother was at a loss what name to choose, and finally fell back on John. He seems half in the way; and, if he once gets out of the way, he is sure to make his mark. Visions of freaks and moods come to us in the name of Edward. He is not a bad man; and, if you try, you will find a bright side to his life. He can be coaxed easier than the rest of mankind; but don't try to drive him. Peter is odd, as his name sounds, and has his characteristic way of doing things. Frederick always has a stray penny to give the sweepers at the crossings; and if he does not look out for a rainy day, he seldom needs a cover, as do some of his fellows. Charles is very tender-hearted, if one is in trouble, and you are sure of a good listener in Charles. He loves books, pictures, and flowers as well as his sisters, and can sew on his buttons equally as well. Henry calls one back to the Henrys of England—the Henry of so many wives; and although I can call to mind a hundred devoted husbands by that name, I should be on the look-out for a journey to Indiana if united to one by that name. Henry is called obstinate, and yet that is the only trait that makes a man of him. I always think of Samuel as the little kneeling boy, and mark him as an exemplary man. You should always find sobriety in that name, but sometimes Sam is ahead of his mates in fun-making. He is bountiful, and we join in singing,

"Uncle Sam is rich enough," etc.

Albert seems a friend to everybody; we take to him, and look up to him for his scholarly ways and good habits. I have always felt a partiality for the Benjamins. They were always good, away back to the youngest son of Jacob. They are a comfort to their fathers and mothers, and rarely bring sorrow upon them. Frank is jolly and careless, and moves through the world, caring but little whether it rains or shines.

To all the surnames used as given names, I will only say that each individual carries a sort of peculiarity which is found in no other class of names. I feel sorry for Alonzo, Lorenzo, and Adolph. I feel disappointed in them; and they pass through the world as though it had not brought them what they had expected. Such romantic names as Os-

sian. Royal, and Llewellyn, do have their thoughts of greatness, and, sometimes, come to something; but, generally, the world expects too much of those, and no one is surprised if they climb to the topmost rung of the ladder, or fall off the first one; they always say, "I told you so;" so how much you may honor or venerate a hero or noble man,

don't hinder your darling's progress by naming him after a man whom you know is in a walk of life your son can never reach, as well as if he had only been plain John or James. The Archibalds, Rignarolds, and Epaminondases, that almost unlock your jaws to speak, make strange characters. Don't take them. LITTLE HOMEBODY.

Department of Physiology—Our Sanitarium.

Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

VITALITY AND CHEMISTRY.

BY R. T. TRALL, M.D.

BEFORE the problems of life can be understood, and even before we can have a rational basis for their investigation, the distinctions between vital and chemical actions and conditions must be clearly defined. They are as distinct as are life and death, yet scientists are continually confounding them. "Vital Chemistry" is a misnomer. Organic and chemical actions are antagonistic under all circumstances; yet because the elements or constituents of both living and dead matter undergo various changes of atomic or molecular arrangement, vital processes are regarded, by chemico-physiologists, as a peculiar or modified chemistry. There is no chemistry in living structure.

What is chemistry? Simply the combination and separation of elements. What is vitality? The transformation of elements. In chemical actions or changes, two or more substances unite to form a third, each equally losing its individual character, and each equally capable of recovering its individual character at any time by mere separation; and this combination and decomposition of *inorganic* elements is all there is of chemistry. In vital actions or changes, elements (ultimate in the vegetable and proximate in the animal kingdom) are *transformed* into other substances, which other substances develop, grow, and maintain their identity. In chemical actions all substances concerned are mutually and equally changed. In vital ac-

tions only one set of substances is changed. Vitality does not combine or unite with other substances, but incorporates their elements into its own structures and organs, which appropriation means development and growth—nutrition in contradistinction to accretion.

When an acid and an alkali come in contact, there is mutual destruction. Each is annihilated, yet each may be restored. Nothing of the kind occurs in the domain of organic life. When food and a living organism come together, the food only is destroyed. It ceases to exist; it is transformed, and its elements incorporated into living structure, while this remains unaltered. Food does not unite or combine with the structures; nor can it be separated from them. It is *used*, not combined, hence it can not be reproduced or restored. Nor are vital structures decomposed. They are *disintegrated*. Disintegration and decomposition are very different processes. One is transformation, the other mere separation.

After performing the functions of life the vital structures are resolved into excretions—bile, sweat, urine, fæces, etc., processes unknown in the inorganic world. No chemist can decompose either food or living structure into its constituents, and reproduce it by re-combining them. Nor can he determine the constituents of either by analysis. He can only tell what substances remain

which are tangible to his senses after the process of analysis has been performed.

Chemistry can not form organic matter. True, the chemist can very closely imitate some of the products of vitality; he can make a very fair imitation of protoplasm, albumen, cells, germs, etc.; but they are only imitations. They possess no characteristics of vitality except form and consistence. They will not grow; they will not perform any distinctively vital process. They can not transform elements.

In the vegetable kingdom, inorganic elements are transformed into (not combined with) the first or lowest grade of living structure, having the vital properties of irritability (organic perceptivity) and contractility. Hence the vegetable kingdom feeds directly on the mineral. In the animal kingdom, the proximate elements produced by the vegetable kingdom (alimentary principles) are transformed into a higher grade of living structure, having the additional vital property of sensibility. The animal kingdom, therefore, feeds directly or indirectly on the vegetable.

But feeding is a vital act, and nutrition is in no sense, nor in any stage or process, a chemical action. One has only to trace a mouthful of food through its various changes (transformations) in the vital organism to have a perfect demonstration of the principles I am advancing. It is masticated by the teeth, insalivated by the glands, swallowed by the muscles, digested by the stomach, absorbed by the lacteals and veins, aerated by the lungs, circulated by the vessels, and assimilated by the capillaries. All of these processes are vital; not one of them ever occurred in a dead or inorganic substance. Vital forces supersede chemical affinities, and are entirely independent of them. Hold your hand to the fire and it will not burn like a stick of wood, but it inflames, and inflammation is a vital process—resistance to morbid agents. Water applied to the living skin does not rust or oxidate it as it would iron or brass; nor will nitric acid decompose the integument as it would saleratus. Nor are the processes of disease, waste, and decay in any sense chemical.

On these premises we are able to explain, and not only explain, but demonstrate, the

fundamental problems which have baffled the investigations of medical men in all ages, viz., the essential nature of disease, and the *modus operandi* of medicines, and thereby place medical science and the healing art on a philosophical basis.

Disease is not an entity, but an action. It is not a thing or force at war with vitality, but a defensive action on the part of the vital powers. Disease is as much a vital process as health is. Health is vital action in the construction and conservation of the bodily organs, and disease is vital action in the defense and reparation of the bodily organs. Health is the "normal play of all the functions;" disease is *remedial effort*, or their abnormal play. The famous "*Vis medicatrix naturæ*," therefore, which medical authors from Hippocrates to 1873 have told us "defends the system against morbid causes" and "cures disease" is a myth. It has no existence except in imagination. All living organisms are self-constructing, self-depend-ing, and self-repairing. All that art or external objects can do is to supply favorable conditions, or produce adverse influences.

In theorizing on the nature of disease, our standard authors invariably confound it with its causes; and not unfrequently also with its effects. Nearly all the phrases in medical books applied to disease imply a false theory; most of them are meaningless or absurd. This is why medical theories are so contradictory, so undemonstrable, and so interminable. But if disease be remedial effort, vital action, self-defense, reparation, etc., the important question arises (and an eminently practical question it is, too) "Should disease be cured?"

I say no. Disease being an effort to recover the normal condition, should never be "subdued," "suppressed," "removed," nor killed, nor "cured." Its causes should be removed, so far as practicable, and the remedial effort (the disease itself) so regulated and directed as to render it, if possible, successful. In this manner the *patient* may be cured, and the disease, having nothing further to do, will cease. Every effort to subdue, break up, or cure disease, is simply a war on vitality, the vitality having to defend itself against the doses as well as against the original poisons or impurities.

To illustrate: a sufficient amount of malaria or other miasm in the blood is a *cause* of fever; and the fever is the effort of the vital organism ("*vis medicatrix naturæ*") to rid itself of the poison, to overcome the abnormal conditions its presence has occasioned, and to repair the damages resulting from its presence and the process of expelling it.

Now, this fever, this disease, may always be very easily "cured." It is only a question of dose. Its symptoms (vital manifestations) may be counteracted or suppressed with medicine, leaving the poison still in the system, to be sooner or later manifested in some form of chronic disease. But in order to cure the patient we should let the remedial process continue, properly regulated, until the system is purified; in other words, we should supply such conditions as will enable the vital domain to purify itself with as little wear and waste as possible. This plan would not dispense with physicians, but would render the healing art mainly hygienic instead of mainly medicinal.

But a problem still more mysterious and perplexing to the medical profession than the nature of disease, is that of the "action of remedies." How or in what manner they "operate" on or influence the vital machinery, whether administered as medicines or taken as poisons, is confessedly an impenetrable mystery.

It is the universally-recognized theory of the medical profession that medicines "act" or make peculiar "impressions" on certain tissues, structures, or organs, in virtue of certain "elective" or "selective" affinities which they possess for and exert on those tissues, structures, and organs. They act "preferentially" on certain parts, and "exert their effects" because of properties inherent in themselves which have some special relation to such parts. And the various works on toxicology teach precisely the same doctrine in relation to the *modus operandi* of poisons.

And it may help us to the solution of these questions to notice that the standard authorities on pathology place diseases as entities in the category of medicines and poisons. Medical authors endow diseases, medicines, and poisons not only with properties or powers which can be preferentially exercised on

the living system, but also with instinct, if not with intelligence. A spider prefers a fly to a wasp when both are available, and manifests its instinctive if not its reasoning powers in entrapping the one and driving away the other. If medicines, poisons, and diseases, prefer, elect, or select one part or place in preference to another, why should they not be regarded as possessing consciousness as well as a spider?

All the medical text-books, and every medical journal teach that diseases "attack" us, "make impressions" on certain parts, "locate" in particular places, "become seated," "migrate," "run a course," are "self-limited," "change their type," "supervene" on other diseases, "supersede" other diseases, "simulate" other diseases, etc. And to complicate the mystery, physicians in almost the same breath tell us of "carrying the patient through the fever," "breaking up the fever," "arresting the fever," "conducting the fever to a favorable termination," and, lastly, "curing" the fever.

Such technical jargon is attributable only to false premises; a correct theory of the nature of disease and the *modus operandi* of medicines enables us to use rational and intelligible language. Medicines and poisons have no affinity of any kind with vital structures. Their relation is that of antagonism. They do not act on the living system at all; they are acted on. In the relations between living and dead matter, the living is active and the dead passive. This is a law of "universal nature."

To illustrate: if a person swallow an emetic drug (ipecac), the stomach expels it by the act of vomiting. This proves an *elective repugnance* on the part of the stomach, instead of a "selective or preferential affinity" on the part of the drug. The vomiting is the disease, and this is an action, not an entity—a remedial process. The drug is the *cause* of the disease; and the disease (vomiting) is remedial effort because it contemplates ridding the system of a morbid material, and thus recovering the normal state.

The classification of the *materia medica* is based on the supposed preferential action of medicines. Thus, if a drug is expelled by vomiting, it is said to act on the stomach, in virtue of a special affinity for that organ.

If another drug can be better eliminated through the cutaneous emunctory, it is said to be a diaphoretic, and to have a special affinity for the skin. If a third substance is more easily got rid of through the excretory function of the kidneys, it is said to act preferentially on the kidneys, and is termed diuretic, etc., etc.

By reversing these premises, the truth becomes apparent, if not self-evident. Classes of medicines (and the same is true of the forms of disease) represent merely the manner in which the living system makes an effort to rid itself of the presence of noxious agents, thus illustrating the statement of Professor Martin Paine, M.D. ("Institutes of Medicine"), that "remedial agents make their impression in the same manner as do the remote causes of disease," and proving the exact contrary, that they make no impression of any kind, but are *impressed*.

Another delusion is dispelled by the principle I am advocating—the "properties of medicine." These are as imaginary as is the "*vis medicatrix naturæ*." Medicines are said to possess one, two, five, ten, or more distinct "properties" or "remedial virtues," as stimulant, tonic, nervine, astringent, emetic, ca-

thartic, etc., which they exercise or "exert" on certain organs, structures, or tissues. Some medicines, as alcohol, opium, tobacco, etc., are said to possess nervine, stimulant, and narcotic properties, and sometimes to "exert" one property and sometimes another. Thus, if the dose be small, the nervine property is exerted; if the dose be larger, the stimulant property is exerted; and if the dose be very large, the narcotic property is exerted. Now, the fact that the property depends on the dose, disproves the theory, and establishes the opposite doctrine. It proves that a given quantity is expelled or resisted in one manner and direction, a larger dose in a different manner and direction, and a still larger dose in a still different manner and direction. Exhilaration, stimulation, and narcosis are manifestations of vital action, not of effects which have been exerted by the properties of the foreign substance. When it is considered that all of the *effects of medicines*, as described in the *materia medica*, are *symptoms of disease*, as described in the pathologies and toxicologies, the principle I am contending for may be deemed worthy the investigations of scientific men from the point of view I have indicated.

WAS HE BORN SO?

IN describing the death of the late Richard Yates, member of Congress from Illinois, a writer in the *Farmer City Journal* says:—

Poor Dick Yates went down into the grave impelled by a fatality that was unyielding. His difficulty was not one of his own seeking. It came to him by transmission, and he was no more responsible for it than is the child born with the taint of scrofula, or the person who finds his system pervaded with poison communicated by the bite of a rabid dog. He was an inebriate from conception; he was doomed when he lay on his mother's breast; and his subsequent yieldings to stimulation were no more than the outbreaks of congenital disease. He fought the thing gallantly; he fought it with all the odds against him; he fought it as a man fights against pulmonary consumption which has fastened itself upon him; and for these struggles, for this fighting off of the final catastrophe as long as he did, he is entitled to consideration and credit. Despite these facts; despite that he

died combating the infernal disease that was fastened upon him before his birth, *The Advance* and *The Advocate* [religious journals published in Chicago] do not hesitate to dig up his poor body and put upon it contumely and insult. "Drunkard's grave," "murdered by the appetite that disgraced his life," and thus from them there breaks upon the air a duet which recites only calumnies over the grave of one of life's most conspicuous unfortunates.

It is worthy of note that from out all the bitterness of politics and partisanship, there has not, in any responsible quarters, been uttered a single word derogatory to the dead statesman. His virtues, his services, his struggles, have all been put in the foreground, with the kindly hope that they would intercept the vision, and shut out the darker features of his life. It is the political press—a force unsparing in its likes and dislikes, and which neither gives nor accepts quarter in its savage conflicts—which, with kindly hands, spread the mantle of charity over the life of Richard Yates.

The infirmity from which Mr. Yates suf-

ferred for many years, is well known to the public, and we would not say a word to add a pang, save to inquire into the facts above stated, as to the *pre-natal* influences which led the victim on to ruin. Was he, indeed, an "inebriate from conception?" "doomed," while yet on his mother's breast? These are awful sentences, and should not be uttered without the best evidence of their truth. Was his father a drunkard? Did his mother drink habitually to intoxication? and did the child imbibe "fire water" with his mother's milk? Was this his "inheritance of woe?" If so, he was, indeed, more to be pitied than blamed.

As an evidence that he fought the demon—a perverted appetite—and that he supposed that he had conquered, the following address, extracted from a little book entitled, "Temperance in the American Congress," is offered. Mr. Yates said:—

LADIES AND GENTLEMEN—It was not my intention to address you at all until this afternoon, and I feel the need of more preparation before speaking to so large an audience as this. The reason why I did not propose to address this assembly was because having so recently associated myself with the Congressional Temperance Association, I did not like to make a parade of myself before the public. Men sometimes sign pledges, and they break them; but, Mr. President, I have signed for good, and I have made my covenant with God that I will keep mine. But I felt it were better to prove first that I was well established in my new position, before I attempted to express sentiments on this question in that earnest and enthusiastic manner in which I always address my fellow-citizens in behalf of any cause which has the conviction of my judgment and the approval of my heart.

Some two months ago your distinguished chairman, the able and eloquent Senator from Massachusetts—[now Vice-President, Hon. Henry Wilson]—in his kindness, in the goodness of his great big heart, came to me with a petition numerously signed by members of Congress, and said: "Governor, I want you to sign a call for a temperance meeting." "With all my heart," said I. I signed it. But the temperance meeting did not come off. I became impatient. I went to the honorable Senator and told him I was tired of waiting; could he not furnish me a pledge? He said he could to-morrow. The next day he furnished me with a printed pledge of the Congressional Temperance Society. I put it in my pocket, took it home,

took it to my room, read it carefully, and, after one look to God and one to home, I signed the pledge. I raised myself to my full height, and I was FREE. [Great applause.] If I refer to myself in the remarks I have made, and which I intend to make, I assure you it is not from egotism, for I take no peculiar pride myself in having been addicted to the use of ardent spirits. But there is another reason why I feel permitted to refer to myself, and that is, because while I have considered that I was only a moderate drinker, it has been published all over the land that I was a drunkard.

Fellow-citizens, there was some truth in this, and there was a vast deal of error in it, too. I was addicted to drinking occasionally as a stimulus, as I supposed, to strengthen my nerves [laughter], and as a heightener of social joys. But, Mr. Chairman, differently from other men, I had a most unfortunate difficulty with myself, and that was, I had a wonderful facility, whenever I drank, of letting everybody know it. [Laughter.] My sprees were not frequent, but they were long and they were loud. [Laughter.] The grand prairies of Illinois did not furnish area enough for one of my forward movements. [Laughter.] That was not only the case; but whatever I have done for the last seventeen years—whether I had to make a speech to a political meeting; whether I spoke against the Nebraska bill upon the floor of this House; whether, as Governor, I wrote a message, or published a proclamation, or prorogued a secession Legislature, the universal charge of the opposite party was, that all these acts were done under the influence of whisky. [Laughter.] Now, fellow-citizens, I have concluded to put a stop to this matter. The editors and reporters of newspapers are an honorable class of gentlemen whom I respect; but I want those libellous scribblers who have made so many misrepresentations as to my course of conduct, to understand that from this time henceforward their vocation in that respect is gone [laughter and applause], and they may now publish their libels until the hand that writes them shall fall withered and palsied; but I never intend that they shall have any license or authority to publish me as a drunkard again, even if I have to abstain, as I will abstain, from the mildest glass of claret that ever the fair hand of the fairest lady in this land should present to me. [Applause.]

There is the evil of the thing—this misrepresentation, this liability to misrepresentation. Why, sir, after I had made these speeches, some sharp article of abuse would be published in the paper, and some "Friendly-Indian" of mine [laughter] would mark around it with black lines and send it to me for my Christian contemplation and

supreme delight. [Laughter.] I will stop it. I have promised God; I have promised my country; I have promised that proud Commonwealth which for twenty-five consecutive years has honored me with all her public positions, in the Legislature, as Governor, as member of both Houses of Congress; I have promised all who love me, and I have promised Katie and the children [loud applause], that I will never touch, taste, nor handle the unclean thing [applause]; and by the blessing of God and my own unfaltering purpose, I intend to fight it out on this line to the last day in the evening of my life. [Applause.] If all you, gentlemen, would do the same thing, you would lose nothing in mind, body or estate. [Laughter.]

Fellow-citizens: It may seem strange, but I would, as I feel now, as soon drink fire from hell as whisky, for it is hell and damnation, too. It destroys the health, and mars the beauty of the body; it can bow down to earth the most giant intellect, and make it weak as that of a child. It demoralizes and it annihilates the immortal soul. It makes a man forget his children or the wife of his bosom, and treat them with harsh unkindness and barbarity, and even murder them. Unaffected by intemperance, he would peril his life for that wife of his love; he would dive into the ocean's depths, face the cannon's mouth, or peril his life amid the flames of the burning dwelling to snatch from death his darling babe.

I do not suppose at all that I am superior to anybody else in intellect. I certainly have no special claims to consideration from birth or fortune. But there is one thing I do claim, and that is, that God has endowed me with nobility of soul, with warm and generous impulses—a heart as unfathomable in its affections as the ocean, and as broad as the area of humanity; and I appeal to you, Mr. Chairman, from our slight acquaintance, if you do not think I have enough of the *ardent* about me without *ardent spirits*. [Laughter.]

Mr. Wilson.—Yes, you have.

Mr. Yates.—I would say to the young man, that grandeur of human character does not consist of transcendent genius alone. It does not belong alone to the statesman beneath whose eloquence listening Senators sit enraptured; it does not belong alone to the warrior who bears his proud, unconquered banner over every field; but it does consist in force of character, in force of soul, feeling, thought, and purpose. Cæsar was a weak man when he sacrificed the liberties of Rome by suffering Mark Antony to put the crown upon his head. Washington would not have been great if he had yielded to the temptations of his willing army and accepted a crown at the expense of the liberties of his country. The reformed drunkard accomplishes a more heroic achievement than

did the Spartan band at Thermopylæ, because he conquers himself. That man is only great who seeks right and truth and justice, and adheres to them with strong, vigorous, and perpetual purpose.

As to the effects upon the nation, Mr. Jefferson said, many years ago:

"The habit of using alcoholic liquors by men in office has created more injury to the public service, and given more trouble to me than any other circumstance which has occurred in the internal concerns of the country during my administration. If I had to commence my administration again, with the knowledge I have from experience derived, the first question which I would ask from a candidate for public favor would be, is he addicted to the use of ardent spirits?"

The man who is to legislate for a great country, to help make laws and constitutions involving the destinies of millions of human beings, ought to be a man of reflection, moral principle, integrity, and, above all, a sober man. [Applause.] Go into your legislative halls, State and national, and behold the drunkard staggering to his feet or sleeping at his post, and ask yourself the question, whether he is not more fit to be called a monument of his country's shame than the representative of freemen? Would it not be most fearful to contemplate that ill-fated epoch in the history of our country when the demon of intemperance shall come into our legislative halls without shame, remorse, or rebuke; when he shall sit upon juries, upon the bench, and drunkenness run riot among the people. Who then will protect the ship of state upon this maddening tide; who will steer her in her onward course amid the dashing billows; who spread her starry flag to the free, fresh, wild winds of heaven?

Watchman, what of the night? We have been engaged in a mighty revolution. Your army and navy have carried your arms under Grant and Banks against the Gibraltars of the Mississippi, and opened that stream from its source to its mouth. Under the gallant Joe Hooker your troops scaled the heights, and above the clouds unfurled to the sun the glorious flag of the stars. [Applause.] Sherman marches from Cairo to the sea, while Grant marches through the Wilderness to the Confederate capital. The rebellion is crushed. Behold! a whole race set free—the shackles of the ages are broken, and we see full-high advanced the standard of the nation's redemption. "Hark! dinna ye hear the pibroch of the Highlanders?" and borne upon the wings of the wind the slogan shout of universal emancipation? [Applause.]

And now shall this puissant nation, "Columbia, queen of the world and child of the skies," pause in her efforts when there is an enemy in our land more destructive than war, pestilence, and famine combined, which sends annually one hundred thousand men to un-

timely graves, makes fifty thousand widows, and three hundred thousand wives worse than widows—filling our prisons, our poor-houses, our lunatic asylums, and swelling to an untold extent the great ocean of human misery, wretchedness, and woe?

Somebody told me he saw in a Chicago paper the other day, that since Governor Yates had joined the temperance society, whisky had fallen ten cents a gallon. [Laughter.] Well, that's good, indeed. [Laughter.] At all events, it's *good news*, for all that ever kept my slanderers from drinking themselves to death *pro bono publico*, was the high price of whisky. [Laughter.] We will bring it within their reach, for it will have to fall much lower than the present price before it reaches its real intrinsic value—a specie basis. [Laughter.] Mr. President, if old King Alcohol were dead and buried, as he ought to be, beyond the power of resurrection, this nation could bear our national debt like a young Hercules. [Applause.] Then, sir, two blades of grass would grow where one now grows, and unbounded wealth, imperial power, and proud position would be the heritage of the nation forever. [Applause.]

But some say this temperance business is fanaticism—it's a gloomy sort of life. There never was a greater mistake. Temperance is one of the sweetest and most delightful things upon earth; it is the very spring-head of cheerfulness, happiness, and joy—the very chivalry of manhood itself. I have been a temperance man for fifteen days, and I am a gayer boy to-night than I have been for seventeen years. [Laughter.] I think I am the gayest man in the Senate, except the compeer of Clay and Crittenden—the able, indomitable, and gallant old cavalier of Kentucky (Garrett Davis.) I except you, also, Mr. Chairman. [Laughter.] Temperance gloomy? Not a bit of it, Mr. President. My pledge shall be a perpetual charm—"a thing of beauty which is a joy forever"—not a cloud of gloom, but an ever-present rainbow of promise, hope, and beauty. I am as proud of it as of my wife and children, and that is the strongest way I have to express my pride. [Applause.] I am as proud of it as I am of the commission which entitles me to hold the position of an American Senator. By-the-by, Mr. Chairman, I will submit to you the question; I rather think the commission and the temperance ought to go together. [Applause.] What do you think about having "the teetotaler" put into the iron-clad oath? [Laughter.]

You say, of what use is the pledge? I will tell you. Twenty days ago there came along a friend of mine—a Senator—and said, "Let us take a drink." I said, "Certainly—all right." Another friend from Illinois in about three minutes and a half came along and said, "Let us take a drink." Said I,

"All right." It is this way: One drink of liquor is enough for me; two ain't half enough [laughter]; three is only one third enough, and four is chaos. After I signed the pledge I was asked several times to drink, but I didn't do any such thing. [Laughter.]

After I signed this temperance pledge, I wrote to a little lady out in Illinois, who weighs about a hundred pounds, has black hair and flashing black eyes, and "a form fairer than Grecian chisel ever woke from Parian marble," and I received the following answer: "My Dear Richard—How beautiful is this morning! how bright the sun shines! how sweetly our birds sing! how joyous the children! how happy is my heart! I see the smile of God. He has answered the prayer. Always proud of your success, you have now achieved that success which God and angels will bless. It is the shining summit of human aspiration, for you have conquered yourself. All who love you will aid you to keep the pledge. I love you, my dear boy!

KATIE."

"Love, the sun, soul, and center of the moral universe;
Love, which links angel to angel and God to man;
Love, which binds in one two loving hearts.
How beautiful is love!"

As I look over this audience, composed of Senators and Representatives of this great nation, and these galleries blazing with beauty and the worth of the city, and sojourners from all the States and Territories, I ask myself why they are here. Proud England, upon whose dominions the sun never sets, has but one queen, but, thank God, we have millions of queens, who

"Shine in beauty like the night
Of sunny climes and starry skies!"

whose chains we feel, and yet we bless the silken scepter. You are here to give by your presence encouragement to the Congressional Temperance Society, and I propose, sir, that this Society shall be the beginning of societies throughout the land, and that we will push forward the temperance column, move upon the enemy's works, and give him canister and Greek fire. [Applause.] We will storm upon the citadel of intemperance until it shall crumble and totter and fall to the earth. [Applause.] Why do I refer to the ladies? Because their example is mightier than the eloquence of a thousand Senators or the banners of a thousand legions.

You are here to-night to see the snowy white flag of temperance as it is unfurled over the Capitol of your country, as it rises and rises, and unfolds to God and spreads until it shall cover the whole land, and until there shall not be a drunkard nor a moderate drinker to take away the bloom from the cheek of female beauty, and until all the hearthstones of this land shall blaze with

comfort and joy, and happiness and gladness shall dwell in green freshness there. [Tremendous applause.]

And yet, would it be believed, after all this, that he soon after yielded to the tempter? Whether or not *he* "was born so," whether or not he was conceived and suckled in drunkenness, certain it is, he became a victim to the curse which holds thousands, nay *millions*, by the throat, and will just as surely consign *them* to drunkards' graves.

We make drunkards through granting licences to sell alcoholic liquors indiscriminately for drink. Physicians themselves drink stimulants daily, and prescribe them to their patients, yea, to nursing women, and to sucking

babes. And, as though this were not enough, we consecrate the fermented intoxicating stuff, and use it in holy sacraments! Great God, forgive us our sins! We bring the tempter into Thy holy house, and ask Thy blessing there! Is this consistent? Is not pure water a better representative of His atoning blood than intoxicating alcohol? Then why not use *it*? And must poor, weak sickly women and children be drugged into drunkenness by dissipated or ignorant doctors? Are the flood-gates of hell to be forever opened on us? Is there no escape from the fell demon? May God help us to put down this body-and-soul-annihilating curse. "Was he born so?"

LIFE INSURANCE AND PHYSIOLOGY AND PHRENOLOGY.

ONE of the generally recognized and most valuable aids to society is that of life insurance based upon scientific data regarding the probable length of life of a person in health in a particular occupation, and class insurances by ages, sex, occupations, and particular diseases, the latter of which is the refinement of the science of human life considered in its relation to, and connection with, external objects.

The first data of this kind relating to the probable length of life of man were used in England for the purpose of ascertaining the value of a life annuity, or interest in property, to ascertain the number of years' purchase the annuity was worth at any age of a person from one year old up to ninety-four years of age, and are known by the name of the Northampton Tables.

These tables were made in the year 1781, and were based upon the registry statistics of the Northampton district from 1737 to 1780, and included the general mortality of all and every class of persons in that district by all and every kind of disease and cause of death, and in every occupation in life, and of both sexes.

These tables are still used by all courts in England and the United States in estimating the value of life annuities in wills and on dower rights, and all life interests in property where a gross sum in lieu of such interest or income is paid to the party who is entitled to it.

The mode of calculating the probable length of life by these tables was at that time the best at hand, but now we see that it is very unjust to the *healthy* in all cases; for, as we before

said, all classes of individuals and deaths by all diseases were included in these calculations, and as there was then no very decided object directly in view, it was not until the problems of life insurance demanded that the indications of the probable lifetime of *each man* should be read distinctly and practically, and when money is to be made or lost accordingly, that a decided advance was made toward a correct scientific method of determining the probable lifetime of different persons under different circumstances.

When life insurance companies arose, they based their premiums upon those tables, because the errors were in favor of the insurers, as they at once saw the necessity of excluding all persons who were diseased, as they would be most likely to ask for an insurance. This led to the necessity of scientifically investigating into the physical condition of the applicant.

No two persons can be precisely alike in health or disease, or in other circumstances, but still general rules to a certain extent may be and must be regarded in making comparisons and in calculating the probabilities and chances of a long or short life. To ascertain what those rules are, and their extent, is the basis of the scientific method which must be used and applied to well-ascertained facts relating to mankind in all its aspects.

It has been long recognized by physiologists that the physical structure of man is based upon the same laws as animals. That the time of decay and death bears a corresponding relation to the time of growth; that other things being equal, the physical structure of animals

and man would each and all have an equal period of growth and decay peculiar to its class. This law is generally true as to animals in proportion to their sensitiveness to external objects, for in their wild state, or when they are properly cared for by man, nearly all live an equal period usual to their class.

This branch of the subject has been fully and ably stated and examined by Flourens in his great work on "Human Longevity," published about twenty years ago. According to the best authorities on this subject, five times the period of the physical growth is regarded as the natural length of life of that particular animal; and as man arrives at his physical growth at about twenty years of age, his natural life is one hundred years.

The leading physiologists of the present day claim that one certain sign of growth being completed is the union of the bones with their epiphyses. So long as the bones are not so united the animal continues to grow, but as soon as such union takes place the animal ceases to grow. This takes place in man at twenty years of age, in the camel at eight, the horse at five, the ox at four, the lion at four, and the dog at two. Each of these live about five times the period of their growth. This period of life is only shortened by disease or organization, or both, and may be from hereditary causes, or those relating to external circumstances which arise and grow out of the struggle for supremacy in civilized life, so that now the average length of human life among us is only thirty-three years.

The state of the mental organization has more effect upon the health and disease of a person than other medicines in regard to most of the ills with which man is afflicted. "Life's fitful fever" kills more persons in a civilized country than any one disease; the mental condition so affects the physical system that upon the former very frequently depends the contracting of a physical disease which otherwise would not have been contracted or not have proved fatal if the system had not been impaired by mental action.

In a work by Dr. Sweetzer on "Human Life," he truly remarks: "The prerequisites of longevity, it will be understood, are a frugal, sober, temperate, moderately active life; regular, tranquil, and sufficient sleep; a peaceful, unaspiring disposition, with a spirit cheerful, contented, and not over sensitive to the common cares, vexations, and annoyances to which every human being must be, to a greater or less extent-exposed."

Every life insurance company now insists or supposes that its examiner of applicants has the means of ascertaining a knowledge of personal characteristics, natural and acquired, their interpretation, meaning, or indications. All these are essential to a judgment upon the probable length of life of an individual. We assert that no physician can do this without a knowledge of Phrenology in connection with Physiology.

The organization and external circumstances which shorten human life are those in which the uses of Phrenology are absolutely necessary and valuable to all who are interested in life insurance either as medical examiners, officers, or stockholders, as well as policy holders, for if a short-lived person is allowed to come in to participate in the accumulations, the dividends will be lessened thereby and the capital and surplus impaired; and if a person with a prospect of long life is rejected, the premium which he would have paid is lost to the company.

Phrenology tells if a person is frugal, having Acquisitiveness of the proper size, not so large as to be "stingy," or not so small as to be profligate; whether he is sober and temperate, having Alimentiveness of the proper size, not so large as to be a gormandizer or a drunkard, yet a sufficient love of food to supply the body with proper nourishment; whether he is methodical, and leads or will lead a moderately active life, and be ambitious or otherwise, and whether he has a cheerful and contented nature, and a good or bad disposition, or subject to sudden freaks of anger; and whether his moral habits will be good or otherwise, and many other mental qualities in the various combinations of the mental faculties; and the effect which a particular temperament will have on a particular mental faculty or a combination of them; and also in regard to the kinds of mental disease to which a person of a particular temperament is liable, and whether the brain is too large and active for the entire physical structure, and whether he has a well-balanced organization.

No person can discern the different temperaments, and their effects upon an individual, so perfectly as a thorough phrenologist. The mental and physical organization are so blended that the mental must be studied and understood in order to properly comprehend the probable strain and endurance which the physical organization must be capable of bearing in a long life, and the probability of the necessity of such endurance must also be taken into consideration.

The duty, then, of a medical examiner for a life insurance company does not now consist in merely ascertaining whether the applicant has any actual disease, and whether he is descended from a healthy, long-lived stock, and his occupation, etc., but he should be capable of knowing and ascertaining the organs and functions of the mind as well as the body, and the relation which they bear to each other. Whatever will aid in doing this is not to be disregarded, but in the hands of one who knows how to use it, will become a true instrument of practical science. Such is Phrenology and its relation to life insurance.

R. S. GUERNSEY.

VIOLENT DEATHS.

THE New York *Evangelist* compiles the following: The annual report of deaths by violence and accident in New York during the past year presents some curious statistics. There was an aggregate of 1,155. Of these 113 were infants found dead in streets, alleys, rivers, etc. Accidents of a general character and in great variety removed from life 685. Of drowned people there were 151, and there were 101 suicides. The murders were 56, more than one a week. Of the modes of committing suicide, taking poison is still the most popular, and Paris green the deadly drug. More than one-third—34 in number—took poison, and 23 of these made a choice of Paris green. September shows the largest number of self-destroyed people of any month in 1873. Next in order is April, with 12 suicides. May and August each have 11. The female sex only contribute 31 of the 101 suicides. Next to poison comes shooting, 28 persons having destroyed themselves with guns or pistols. This, it may be presumed, is not strictly accurate, for in another table the coroner reports 148 cases of drowning. In the absence of positive knowledge, many of these are not recorded as suicides, though they probably were. Of the drowned, about an equal number were found in the two rivers. In the North River there were 75, and in the East River 73. And it is curious that the unknown drowned hold a relatively similar place in statistics. In the former river there were 24, and in the latter 26. Germany contributes 40 of her people to the suicidal list; the United States, 24;

Ireland 17; England, 12; France, Switzerland, and Russia, 2 each; Italy and Poland, 1 each. There were 6 persons under 20 years of age who were tired of life, and the maximum number, 35, were between 30 and 40 years old. It has been stated that less than one-third of the suicides were women, yet it is noticeable that of the 34 persons who took poison 21 were women. This analysis of a single department, covering about ten per cent. of the violent and accidental deaths in New York for a single year, presents a melancholy feature of metropolitan life.

[It would be still more useful, interesting, and instructive could the *causes* of these suicides, etc., have been given. In the cases of the women, we infer the chief causes to have been inordinate or disappointed affections. It is to be presumed that the men were more or less dissipated, and had thereby lost the power of self-control, becoming hopeless, desponding, timid, cowardly. It is only a miserable coward who commits murder or suicide. Those who read the PHRENOLOGICAL JOURNAL regularly will do neither.]

GOING TO BED.—We should never go to bed, with a hope for rest, sleep, and perfect repose, until “all ready.” The *preliminaries* for retirement are all just as important as are those for the day’s duties. We must not go to bed with an overloaded stomach, in an anxious or troubled state of mind, with cold extremities, or without anticipating and responding to the calls of nature in all respects. Standing over a register, before a fire, or in a stove-heated room, is not the best way to get warm for a night’s sleep. We should take such vigorous exercise as will give quick circulation to the blood, and not depend on artificial, but on natural heat. Attention to all these things should be followed by such devotional exercises as will bring all the feelings, emotions, and sentiments into accord with the Divine will, subduing passion, removing hatred, malice, jealousy, revenge, and opening the portals of heaven to all who seek rest, peace, and sweet repose.

It is a happy custom with many to conclude the evening’s proceedings by singing a sweet, quiet hymn—“The day is past and gone,” for instance—which brings all present into delightful union with each other and with “Our Father which art in Heaven.”—*Science of Health.*



NEW YORK, APRIL, 1874.

THE GREAT TEMPERANCE MOVEMENT.

JUST previous to the late Rebellion, who would have been "wild" enough to predict the total abolition of slavery in these United States? But there was a movement inaugurated which swept the land like a tornado, and wiped out the foul blot forever. Was that event sought, or even anticipated, by the star actors in that great drama? No. One of our foremost statesmen, who had, years before, announced the "irrepressible conflict," and also the "higher law," did not foresee the coming avalanche. He attempted to quiet the fears of his timid constituents by predicting the suppression of the rebellion in "ninety days;" and, at the expiration of that ninety days, he again named ninety days more as the probable limit of the struggle. When men so experienced and so gifted as this late Secretary of State fail to foresee events so portentous, does it not indicate how limited is the reach of the unaided human intellect? Does it not prove that there is a God, who overrules all great events? Is it not true that

"There is a destiny which shapes our ends,
Rough hew them as we may."

Human slavery is abolished in America. Its twin relic of *inhumanity*, of inexcusable wickedness, is drunkenness. Slavery was made lawful by our Constitution. It was sustained by judicial decisions in our supreme courts. But all *that* did not avail when millions of prayers went up to God beseeching His interference. May it not be so in this great Temperance movement, carried on in the interest of mankind, and resulting in glory to God? Who can say this movement is not of Divine origin? What

greater blessing can we ask than that the wicked tempter be removed from our midst? The evil of intemperance is in *every one's experience*, and need not be argued here. The *curse* is on the race. It is our privilege and our duty to pray it down, fight it down, and then to *keep* it down. "Lead us not into temptation," or, rather, according to the better rendering of those words, "abandon us not to temptation." And this is the appeal of all Christendom to "Our father who art in Heaven, Hallowed be Thy name. Thy kingdom come. Thy will be done on *earth*, as in Heaven."

Can drunkard-makers repeat those words and not mock God? Granted that the temperance question is a secular and not a religious question; granted that the sale of liquors be governed by the civil law, we answer so was that other "peculiar institution," and yet it did not withstand the assaults of prayer and powder. Whatever is of God, will stand; while mere human enactments, which are contrary to the laws of God, will pass away like morning mist before the rising sun.

"Truth crushed to earth will rise again,
The eternal years of God are hers;
But error wounded writhes in pain,
And dies amid her worshippers."

Temperance principles are bound to prevail. Temperance is normal; intemperance is abnormal. Temperance is sanity; intemperance is insanity. Temperance means thrift, education, intelligence, enterprise, self-support, safety, progress, virtue, improvement, comfort, good citizenship, and success in life. Intemperance means thriftlessness, ignorance, slothfulness, pauperism, carelessness, retrogression, degradation, discomfort, bad citizenship, vice, crime, and failure in life.

Can there be more than one choice as to which side we will take on this question? Palsied be our tongue and pen if found working against God and humanity and in the interest of hell and damnation. A morning paper, the New York *Herald*, reports the women's temperance movement in Ohio, from which we quote the following paragraphs, indicative of the early spirit of the crusade:

"There is alarm in the capital (Columbia)!

The enemies of King Alcohol approach! They are advancing toward the capital of the State, and have already compelled London, "only twenty miles away," to capitulate. The *Herald* special commissioner has visited several of the more remote towns where the temperance crusade is going on, and candor compels him to say that he has never witnessed more touching evidences of genuine hearty spirit, downright grog and cocktail antagonism, than that shown by the many good women engaged in it. They are all ladies of the best social standing in the several localities where they exhort. They do not hesitate to go down upon their knees on the snow and ice before the liquor saloons, and, with tears coursing down their cheeks, pray that the souls of the benighted dealers in the vile stuff may be touched and the redemption of their victims secured. The constitution of the State of Ohio forbids the issue of a license for the sale of any spirituous or distilled liquor, other than wine made from the grape raised in the State of Ohio, though the sale of malt liquors is not prohibited and license is issued. Notwithstanding this provision, there are not more than half a dozen towns in the State where all kinds of spirituous and distilled liquors are not sold at this time. In most places the drug stores sell by the drink, and every establishment which dispenses soda water in the summer has a "P. D." nectar, which means whisky. In this city the saloons seldom close. Some few of the more respectable shut their front doors on Sunday, but there are always rear ways for ingress and egress. No effort is made on the part of the local authorities to prevent the traffic. It is permitted by common consent. Your commissioner found the dealers in the ardent in this city in a state of no little excitement. Awaiting the approach of offensive operations he interviewed some of the chief restaurant keepers who sell liquors under warrant or license from the collectors of internal revenue for the general government. It is to this shape that legal objection will be taken to the operations of the feminine raiders. The question will be tested whether a license from the United States to vend such liquors is valid or not.

"But the temperance movement has assum-

ed such proportions that not only legislators, but the judges of the courts hesitate to enter earnestly in opposition to it in any shape.

As a practical exhibit of what is accomplished by this crusade, a report in the *Cincinnati Gazette* stated that in Ripley sixteen out of twenty-three saloon keepers have signed the pledge and abandoned the business. It is taking a profound religious turn. The men hold daily prayer meetings for nine hours, while the women visit the saloons. The meetings are crowded, and deep religious interest is manifested. Ladies visit steamboats at the landing and call upon the barkeepers not to sell to citizens. They have been met kindly by captains and barkeepers of the boats. Ripley is one of the largest towns in which the work has gone on. Preparations are beginning in Dayton. In all the southern half of the State the excitement on the subject is great and is spreading southwestward.

And other hearts in other States are energetically pushing this great moral crusade. Already there has been much accomplished in Indiana; and the movement has taken an Eastward and Southward course, Pennsylvania, New York, and Massachusetts rising to the call of truth, mercy, and duty.

TEN BUSINESS RULES

TO SECURE SUCCESS IN LIFE.

MOTTO.—"Call on business men on business, during business hours; transact your business, and go about your business, that others may attend to *their* business."

OFFICES, stores, and other places of business are established for business purposes. It costs time, care, and money to maintain and conduct them. The results are in proportion to the talent, industry, and attention bestowed on the business. A concern which is run without business rules or order, will not only fail, but will spoil young employés, who become irregular, inattentive, slovenly, indolent, and shiftless.

1st. **PROMPTNESS** is indispensable. Each employé should always make it a rule to be "on time," so as not to deprive his employer or others who may require attention of his presence and services when needed. If he be ten minutes behind time, it may cause the loss of time to ten others. Ten times ten minutes are a hundred!

2d. DILIGENCE, is not only a duty to employer, but it secures promotion and increased remuneration. One may not always be pushed with work, in which case he should push the work, and fill up his time as best he may.

3d. LOSING TIME.—One may be disposed to talk and gossip about matters not connected with the duties of the office, which not only consumes their own time, their employer's, but that also of listeners. How indignant would he feel if charged with robbing; and, as "time is money," is he not a robber who wastes another's time? One has no right thus to "fool" away time for which he is paid to work or to attend to business.

4th. VIGILANCE.—To be vigilant in business, not slothful, is a Divine command. It is the duty of an employé to be watchful, wide-awake, and mindful of his employer's interests. Mere "killing time" till the clock strikes the hour to quit won't do; such indifference and neglect will neither secure more pay nor promotion.

5th. ECONOMY.—Each is in duty bound to see that nothing be wasted, paper, twine, tools, books, etc. He is also expected to exercise his *mind* as well as his *hands* in the interest of the business.

6th. A shirk or an eye servant watches the clock impatiently to have the time arrive for lunch or to quit, and is sure to be ready to drop any duty the moment the clock strikes. He is not so careful to be on hand in the morning. Then, he is "in the drag." Such persons are seldom up with their work, and often fail to keep their promises. They are always unfortunate, and never rise in life.

7th. INTEGRITY PAYS.—Let it be understood that "*this* office aims to do an *honest* business." Everything must be on the square. Should a customer over-pay when making a purchase, return him the amount. Should the cash receipts be over, or under, continue the investigation till the error is found.

8th. POLITENESS.—A rough, rude, uncouth, ill-tempered cur, boy, curmudgeon, or man, is a nuisance in any business concern, and the sooner he be set about something to which he is adapted, the better. He will drive away customers. One who stinks of whisky, beer, or tobacco is unfit to stand behind a counter and to wait on customers. One who is polite, patient, kindly, neat, tidy, talkative, honest, friendly, and capable of reading character, to know who wants to purchase, and who simply wants to look at the goods, is the best adapted to the place, and will soon make his services indispensable.

9th. A GOOD PENMAN AND QUICK IN FIGURES.—To excel and turn off work well, and with dispatch, one must write a handsome hand, and be able to compute figures rapidly; also to make change quickly and correctly. Bungling or delay in these is inexcusable.

10th. AIM HIGH.—Honorable aspiration in any calling is laudable. No useful work is menial. A true lady will grace the kitchen no less than the drawing-room. It is just as honorable to sweep and dust an office as it is to wear laces, or count coppers, or keep accounts. The boy who runs on errands, or carries parcels, may, if he does his whole duty, work up through all the grades of porter, shipping-clerk, to bookkeeper, cashier, partner, and principal. Many of our leading newspaper editors and publishers were once newsboys; and most of our leading merchants were once office-boys and clerks. To rise to the highest position one needs experience in all departments of the business. A sailor must study navigation and serve before the mast ere he is fit for captain or mate.

We need not moralize here, though we will suggest that the chances of the boy who abstains from the use of tobacco and alcoholic stimulants will always be the best. If he goes to Sunday-school, takes an active part in religious devotions, he will be better fortified against yielding to ordinary temptations, and will grow in grace, and in a knowledge of God and His righteousness. He will rise.

PRESS NOTICES.

ONE who has given a little attention to the matter would think that the notices by the press, of the various publications which are distributed among the gentlemen of the quill by way of courtesy or exchange, were more the product of fancy, or caprice, or prejudice, than the result of candid examination. We do not claim more consideration and forbearance from the "literary editor" than most of our contemporaries have a right to expect, and are by no means disposed to complain of the treatment our successive monthly issues generally receive at the hands of that very useful and erudite gentleman. We are sometimes amused, however, by the differences of opinion, more or less clearly indicated by *him*, as we hastily glance over the literary column of one publication after another of the pile that accumulates upon our table in the course of a single day. For the sake of illustration we

will contrast a few "notices" of *ourselves*, not caring to inflict upon another what might be deemed an "odious comparison."

In a recent number of *Hearth and Home* some one takes occasion to administer a dose of what seems very like personal repugnance, through a notice of a certain book. He, or she, says:

"This book is, we should imagine, the work of a person whose mental pabulum has been composed of about equal parts of the writings of Sylvanus Cobb, Jr., and of the PHRENOLOGICAL JOURNAL."

A hard hit this, though backhanded, and by one who, according to a definite statement in the same notice, has pursued "a somewhat prolonged course of novel reading," thus being well qualified to estimate the reading matter of the PHRENOLOGICAL at its fair valuation!

The *Inter-Ocean*, of Chicago, makes mention of the January number in the following terms:

"It is an exceedingly pleasant Journal. Without pretending to anything pedantic, or even profound, it conveys in a series of short articles a great deal of interesting information and amusement. It touches upon all topics in any way connected with the character and welfare of the human race, and the great success which has attended its efforts affords ample evidence of the ability and energy displayed in its management. The January number is full of excellent reading matter, that upon Gerald Massey being very timely and interesting. We call the attention of doubting Darwinists to an illustrated paper upon the analogous expressions in men and animals, which is not only singularly striking, but remarkably amusing. The cat man and woman, the rat, the old hen, the donkey, the ape, the hog, the dog-man, are all familiar enough to make the likenesses remarkably suggestive and life-like. There are good papers upon the Hoosac Tunnel; the currency of the future; clean or unclean literature, etc."

To this manner of consideration we can make no objection, regarding it as fair and to the purpose. Turning to another newspaper, the *Philadelphia Age*, we find in a late edition this compact estimate of our contribution to the world's literature. The number under special review is that for February of this year:

"Primarily this Journal is devoted to the science of Phrenology, and as many of the individuals selected for consideration are contemporaneous and distinguished for some marked trait or talent, the conclusions arrived at from a phrenological stand-point are frequently very curious. But the miscellaneous articles are also exceedingly well chosen, and in merit as well as interest, above the average standard."

We scarcely know what the writer signifies by the term "curious;" but if he means *worthy of inquiry* on the part of those who seek information with regard to the useful and good in science and art, we, of course, entirely agree

with him. It is human curiosity which is one of the chief stimuli to mental development and the resultant progress of the race in true civilization.

Another contemporary whose opinion is worth having, the *Historical Magazine*, speaks of us in terms that are cordial enough so far as the JOURNAL is concerned, but at the same time quite caustic in their application to general society. Hear it:

"It is peculiarly interesting to all who have brains which they care for, to all who are not ashamed to look another in the face or be looked at by him, to all who are interested in the Natural History of Man—which of the Apes of the olden time they have descended from—and to all whose life is worth preserving, whose children are worth a decent training, and whose wives are worth being cared for. It is well edited, well illustrated, well printed."

Another publication, of limited circulation, as we happen to know, may entertain the notion that a sharp dig between our ribs, however irrelevant it may be in regard to the subject the writer has under consideration, is essential to its obtaining a larger share of patronage. Mark the stroke:

* * "that large but ignorant class of readers who are inclined to overestimate the value of the questionable science of Phrenology."

How we squirm! and how you, reader, must feel at beholding yourself thus characterized! Ye five hundred and odd ministers, and physicians, and teachers who take the PHRENOLOGICAL, as it goes fresh from the monthly press, what audacious hypocrites, impostors, and knaves ye are! *ignorant* vampires, to batten on the credulity and confidence of whole communities! We confess we rather like this sort of compliment, because it is a confession, as it were, from the mouth of a rival, that we are doing a good work, viz., instructing the *ignorant*, and our clientage is large. The "questionable" part we are willing to leave in great part with Professors Ferrier, Broca, Carpenter, and others, of scientific fame.

By-the-way, here comes the organ of a denomination with which we count many readers, viz., the *New Jerusalem Messenger*; let us hear what it says of us:

"The PHRENOLOGICAL JOURNAL comes loaded with useful and instructive articles. It contains a great amount of practical wisdom for the conduct of life. Its influence can not be otherwise than thoroughly good. The articles are various, short, and clear, and go directly to the mark. It will assist any one in 'knowing himself,' and in becoming a better self."

What! dost thou mean all this, our Swedenborgian friend? Thou shouldst be most careful in thy estimation of us, for the sake of thy twenty or thirty thousand readers. Take pattern of thy neighbor, last quoted, whose caution for the welfare of five thousand or less patrons is so fitly worded! 'Tis sad, you know, to aid in the dissemination of literature which has the quality of questionableness, and also that of fascinating him who reads it. For instance, a dweller in "the land of steady habits" writes, under date of February 4th, last.

"By-the-way, I think that I am one of the oldest readers of the PHRENOLOGICAL JOURNAL, having become interested in the matter, I think, thirty-seven years ago. Ever since that time I have studied it, and liked it. I always find something for my instruction. I should give up any and all publications before I should give up the JOURNAL."

Misguided man! Still lives he in his "ignorance!"

COMMERCIAL OBSTRUCTIONS.

WE know of nothing surer to pervert and weaken the moral sense of a community than the present management of our custom-houses. There are swindling, theft, corruption, and downright robbery in them from top to bottom, and all the way through. It has come to be a saying among importing merchants that it is no sin to smuggle or to cheat Uncle Sam. Why? Is it because Uncle Sam, through his miserable minions, practices "sharp" on all who deal with him? If anything would reconcile us to open our ports and to declare unobstructed trade to all the world, it is the wicked swindling practiced by custom-house officials. There is no satisfaction in conducting business at present through this channel. This Government, in such a department, is like a mother who, instead of assisting her children, turns upon them, and seems to take pleasure in destroying them. Granted that now and then an importer gets the better of the Government agent, *that* is no reason for using the custom-house to feed a parcel of hungry politicians. Unless the perpetual abuses be stopped soon, there will be a rebellion among merchants. They will not submit.

Having occasion to import a few anatomical plates from London not long ago, we gave an order, and in due time received from the manufacturer the invoice, amounting to \$165, *on which the duties and custom-house expenses* amounted to \$54.81!

For the information of our readers we copy the bill, with all the items as rendered to us, to

show how they do it, and to warn the uninformed against venturing on the extra hazardous business of importing goods through the American Custom-House. Here is a copy of the bill:

New York, December 29th, 1873.

MR. S. R. WELLS, Broadway, New York.

TO THE MORRIS EUROPEAN EXPRESS,
CUSTOM HOUSE AND FORWARDING AGENCY.

No. 50 Broadway.

No. 1094, One case, per Java, 25, freight and charges to New York, gold \$ 6.41
Duty on \$165 at 25 per cent. less 10 per cent. 37.13

Total, gold \$43.54
Premium gold, 10½ per cent. 4.77
Custom-House fees, 80; cartages, \$1, P. S. 1.80
Postage, insurance, cooperage. 40
Custom-House storage, General Order storage. 80
Custom-House broker, bond, commission, etc.,
Import entry. 3.50

Total \$54.81.

Received payment, — MORRIS.

The idea of making it cost us \$54.81 to import the worth of \$165 in scientific materials is simply ridiculous, and we are heartily ashamed of our pettifogging officials who permit such an abuse to exist. If we can not have a little more common sense, and a little less obstruction, extravagance, and wickedness in the management of commercial interests, we shall look to extreme measures in other directions, namely, the abolition of the whole system of custom duties.

PROPOSED PHRENOLOGICAL CONVENTION.

WE have received several responses to the suggestion in the JOURNAL that there be held in Philadelphia, during the Centennial season, in 1876, a Phrenological Convention. So far as we hear from our friends, they favor the idea. Such a Convention, however, will be attended with some expense—such as the hiring of halls and the necessary assistance.

A gentleman of Philadelphia writes: "I am willing to take hold according to my means, and would suggest the sale of stock on shares as a means of raising funds for the furtherance of the object."

A Convention might be so conducted as to be a source of income, which could be used to redeem the stock and might be applied to the furtherance of the subject in any way that the stockholders might propose. We should be glad to hear from other friends, and if any one will draw up a concise, yet clear, statement of how such a Convention may be conducted and the enterprise be made self-sustaining, we should be glad to present it to the readers of the PHRENOLOGICAL JOURNAL for their approval.

Department of Literature, Science, Education.

OUR EVERGREEN TREES.

HOW very little is really known about plant-life in general by the large number of travelers that annually pass over our great railroad lines. They usually notice that a distinction exists between the evergreen and deciduous classes, but that is all—everything beyond is a mystery. I recollect, soon after the opening of the Union Pacific R. R., an incident that occurred to myself, which will illustrate the usual *nonchalance* of the typical traveler for pleasure. While passing through one of the picturesque cañons, I had stepped out on the platform of the car to ascertain, if possible, the exact species of pine that clothed the mountain sides so beautifully, when a tourist, fresh from the perusal of his guide-book, tapped me on the shoulder, and asked if I desired any information about the scenery. I informed him of the subject of my query, when he promptly replied, "Oh, my dear sir, those are the *common fir*!" The old adage of ignorance and wisdom in connection with bliss and folly, occurred to my mind, and thus the conversation ended.

Let the traveler from New York to the Rocky Mountains select any one family of plants as a special study, and, my word for it, there will be sufficient interest and a never-failing source of pleasure to occupy every moment of leisure on the journey. I propose in the following paper to give my impressions of the various cone-bearing, or, as they are popularly termed, the evergreen trees, that may be seen in such a trip as I have suggested. In passing through the lower part of the State of New Jersey, we at once meet with extensive tracts of woodland, composed entirely of pines; and in usual parlance these are called the Jersey Scrub Pine, thus applying the common name of one well-marked species to the three members of this genus found here more or less plentifully. The Pitch Pine (*P. rigida*), which is, perhaps, the most numerous, is by no means a "scrub," although, on account of the barren sandy soil where it is frequently found, some groves are

small in size as well as imperfect in outline. When growing in congenial situations it forms a large sized tree of fifty or sixty feet in height, with dark, rough bark; and when standing alone, impresses one as a very beautiful evergreen. The timber is hard and firm, although very resinous, and not of the first quality—indeed, it is inferior in this respect to most other species.

The Northern Yellow Pine (*P. mitis*), known in the South as the Spruce Pine, is one of our excellent timber trees, when in suitable soil; but, unfortunately, it is more frequently found on poor land, thus giving it a stunted appearance. It will attain the height of fifty or sixty feet under favorable circumstances, and is then a noble-looking specimen, such as we would desire upon the cultivated lawn. Its timber is far superior to the first, being durable, fine-grained, and only moderately resinous.

The third species is the Jersey, or Scrub Pine (*P. inops*), a tree of little importance commercially; its small size and very resinous character debarring it from forming a good timber tree. Still, I have frequently noticed young and thrifty specimens presenting a beautiful appearance, well calculated to encourage the collector of ornamental species.

The Red Cedar (*Juniperus virginiana*) is common at the commencement of our trip, as well as in most localities throughout the East. The heart-wood, red in hue, is of the most durable character; and its foliage, of the deepest shade of green, imparts a peculiar and beautiful appearance, especially when thickly dotted over with the small glaucous fruit. Its habit is so variable that in a large group it is no uncommon sight to find each specimen entirely unlike. From the strictly upright column through all the intermediate grades, to the very perfection of a "weeper," the Red Cedar supplies us with complete examples. Occasionally, on the dry, sterile banks, we chance to espy a plant of the Common Juniper (*J. communis*), with its bright silvery leaves, only attaining the size of a

large shrub with straggling outline, but always pleasant to behold.

We may also observe the White Cedar (*Cupressus thyoides*) on our trip, although now rare along the line of travel, being confined to the low, marshy districts, where it forms a very large tree. Its timber ranks among our most valuable species—soft, fine-grained, and exceedingly durable. The common name of White Cedar has been unfortunately applied to a very distinct tree—the American Arbor Vitæ of the North, thus exemplifying the importance of botanical titles.

We pass into Pennsylvania and find all the foregoing species excepting the last, although the Red Cedar and Pitch Pine greatly preponderate. As we near the capital of that State, we observe small groves of the handsome White or Weymouth Pine (*P. strobus*), with its smooth, pale bark, and long, silvery foliage. It is undoubtedly a fine specimen for ornamental purposes, and the quality of its timber is unsurpassed for the various uses to which it is applied.

If we keep our eyes open for novelties, we may espy the rarest of all our Northern native species, the Table Mountain Pine (*P. pungens*). Michaux, the younger, in the "North American Sylva," says it is not found in any other part of the United States except on the Table Mountain of North Carolina; but, thanks to the discriminating eye of Thomas Meehan, the well-known botanist, it has been detected in two or three localities in Pennsylvania and elsewhere. Its timber, I believe, is of no special value, but it is destined to form one of our handsomest evergreen trees for lawn-planting. Should we diverge from the usual route at Harrisburg or Columbia, and pass southward through Virginia, we will again meet with this species in considerable numbers.

Here we may also meet with another Southern species, the Loblolly Pine (*P. tada*), growing to a large size, and clothed with long, light green leaves. The timber is in very general use throughout this region, and further South, although spongy and full of resin. It should not be regarded as of even good quality, as it is liable to warp and shrink, as well as decay quickly when exposed to the weather.

As we pass westward we find very little to

interest us in the conifer family, until we near the Rocky Mountain region, and here all the vegetation appears to undergo a complete change. We now find none of the evergreen forms that have been so familiar on our travels; and the new experience is so remarkable and full of interest, as to require many weeks to become fully acquainted with our new-found friends. Evergreens, such as I have previously described, are noticed singly or in groups all the way to the Mississippi River, and very rarely beyond; but after that, as we cross the great prairies and plains, they are absent.

Upon approaching the Foot Hills in Colorado, groups of a sturdy, rough, two-leaved species, closely allied to the Austrian Pine of Europe, is seen in immense numbers. It is the Heavy Wooded Pine (*P. ponderosa*), so named on account of the remarkable weight of its timber, and known here as the Yellow Pine. It is exceedingly abundant wherever a tree can grow, and according to the fertility of the soil its size increased or diminished, varying in this respect from a dwarf shrub to an immense veteran of nearly one hundred feet in height. On the Sierra Nevada of California I have measured trunks of this species that were twenty feet in circumference and over one hundred feet high, and such are not uncommon.

As we near the taller peaks, we notice on their rocky sides, at the base, a low, shrubby species, called the Single-leaved or Fremont's Pine (*P. monophylla*), in allusion to the single leaves on the young plants for the first two or three years. The seeds are edible and devoid of the resinous taste common to most other species; but beyond this we know of no other valuable character which this tree possesses.

The Twisted-branched Pine (*P. contorta*) is evidently a misnomer, for it is really one of the prettiest little species that we meet. It is always regular in growth, with a conical outline, and this, together with its bright green foliage, will doubtless make it a handsome specimen for cultivation. The lumbermen call it the Red Pine, but with the quality of its wood I am unacquainted.

Balfour's Pine (*P. Balfouriana*, lately called *P. aristata*) we find at very high elevations on the mountains, and is a species which

strikes the eye of a stranger at first sight as new and remarkably distinct, especially if early in the season. Its flowers are very conspicuous—the sterile being golden yellow in color, while the fertile are of a deep plum-purple hue. The leaves are short, stout, crowded, and all curved upward, the under sides revealing a series of silvery lines, which forms an additional attractive feature.

Another species which we occasionally find quite plentifully at a high elevation, is the Flexile White Pine (*P. flexilis*). This pretty tree resembles the common White Pine of the East, and can at all times be singled out on account of its smooth bark and slender leaves, the latter crowded in tufts at the extremities of the branchlets. It is a tree of only medium size, and its timber is frequently cross-grained and knotty, thus rendering it unfit for use.

We will now speak of the Spruces and Firs, the crowning glories of this mountain range. As we ascend the tallest peaks, and arrive at what is termed the timber line, we notice dense groves of a peculiar-looking spruce, in many instances of the largest size. This has been named in honor of one of America's greatest botanists, Engelmann's Spruce (*Abies Engelmanni*). It is a tall and very handsome conifer, quite compact in growth, with an abundance of silvery foliage. The lumbermen and miners have given it the name of White Pine, I suppose in allusion to its soft white wood. It is emphatically an Alpine tree, enduring the rigors of an almost endless winter with perfect impunity.

In ascending the mountains, wherever we find a ravine containing a water-course, there we are pretty sure to observe the tall, tapering spires of one of the most lovely evergreens known to botanists; I allude to the Menzies' Spruce (*Abies Menziesii*). The younger trees are perfect marvels of beauty, glistening in the sunbeams like frosted silver, or occasionally with a bluish tint that is indescribable. It is known here as the Balsam Fir, but is entirely distinct from the tree of that name at the East. The wood is not very valuable, being cross-grained and knotty. Unfortunately, when in cultivation, the foliage has an inclination to drop at maturity, and in consequence the specimen becomes speedily disfigured.

Associated with the above, and always handsome, is the Great Silver Fir (*A. grandis*). Although much inferior to the trees of the same species found growing on the Sierra Nevada Mountains of California, it is yet a tall and very comely conifer throughout the Rocky Mountain range. In some sections it has received the soubriquet of White Spruce, possibly on account of its fine-grained white-wood, which is of good quality. It has long been in cultivation, and proves to be hardy and very beautiful in the Eastern States.

Douglas' Spruce (*A. Douglasi*) is found quite plentifully over these mountain ranges, but not at very high elevations. It forms a tree of the largest size, with dark-green leaves and conspicuous cones, the latter prettily fringed with leafy bracts. This is the Swamp Pine of the Uintas, and furnishes a hard and tough, although coarse-grained, lumber. Upon referring to my old memorandum book I find the following entry respecting this species on the Sierra Nevada Mountains: "Douglas' Spruce frequently twenty-five feet in circumference." I may add these measurements were taken five feet above the ground. It has not proven valuable as an ornamental tree in the Eastern States, but in England it succeeds well.

Around the Foot Hills we notice a peculiar spreading dwarf Juniper, a variety, in fact, of our Common Juniper of the East, with bright silvery foliage, and a creeping habit. Its common name, the Alpine Dwarf Juniper (*J. communis* var. *Alpina*) gives us a fair insight into its character. It is the same plant found so plentifully along our great Northern lakes. In the same localities as the last may be found a striking form of our Red Cedar, with glaucous, bluish leaves, but otherwise identical. It would certainly make a pretty specimen tree.

Higher up we chance upon an occasional group, or single tree, of the Western Juniper (*J. occidentalis*), of small size, but gnarled and spreading in character, with larger fruit than the above. The wood is white, excepting the very center, which is bright red in color. These old veterans, apparently a century old, withstand the hard and frequent storms that sweep over this mountain region, and look as if they were good for another lifetime yet.

Thus I have endeavored to call attention, in a very brief manner, to such of our coniferous trees as may be observed on our proposed trip. If we had diverged further North, or even South, we should have increased our list; but as we selected the dividing ridge, as it were, between the Northern and South-

ern plants, we may not allude to them in this connection. Other families of plants are of equal importance, as well as interest, and I may at some future time speak of them, if my readers have not been discouraged with this, my first botanical trip in the pages of the PHRENOLOGICAL JOURNAL. JOSIAH HOOPES.



THE DUKE D'AUMALE.

THERE is point, clearness, and emphasis in this remarkable countenance. The "look" seems to pierce and penetrate through and through. Who could hope to escape such a sagacious and searching scrutiny? No wonder Bazaine went down before such a mental marksman. Observe that wedge-like forehead; that prominent and pointed nose,

like the cut-water of a clipper ship; and those piercing eyes! Every word he speaks is like swords cleaving their way through flesh. Yes, but has he not large Benevolence? and would he not be kind? That depends. When acting as a judge in a cause which drew the attention of the world, it is not likely that he would swerve from duty.

He may be charitable in ordinary affairs, but when France was the sufferer by reason of the disloyalty of the man who is on trial before him, we see but one result. And so Bazaine went—not to the guillotine, but into exile! Here is a short sketch of D'Aumale:

The court-martial held at the Trianon, Versailles, for the trial of Marshal Bazaine upon the charges of treason and cowardice when in command of the French army at Metz, was presided over by one of the princes of the Orleans royal family, whose character and ability have been long recognized by the French people as much above the average of those of the old nobility. The Duc d'Aumale, or Henri Eugène Philippe Louis d'Orleans, fourth son of King Louis Philippe and of Queen Marie Amélie, and, therefore, uncle to the Count de Paris, was born in Paris on Jan. 12, 1822. He was educated, like his brothers, in the Collège Henri IV., and at the age of seventeen entered the military service. In 1840 he accompanied the eldest of his brothers, the Duke of Orleans, to the war in Algeria, and went through the campaign of that year, but returned to France in 1841, and completed his military education at Courbevoie. In 1842 he was again employed in active service in Algeria. In command of the sub-division of the army engaged in the district of Medeah, he conducted one of the most spirited and effective operations of the war, capturing the camp of Abd-el-Kadir, with 3,600 prisoners, and with the treasure-chest and dispatches of the Arab chieftain. For this service he was promoted to the rank of Lieutenant-General, and was appointed to the command of the province of Constantine. In 1844 he commanded an expedition against Biskara, and in 1847 succeeded Marshal Bugeaud as Governor-General of Algeria. In 1844 he married a lady of the Neapolitan royal family, Maria Carolina Augusta de Bourbon, daughter of Prince Leopold of Salerno. Upon the dethronement of King Louis Philippe by the revolution at Paris in February, 1848, the Duke d'Aumale resigned his government of Algeria to General Cavaignac, and joined the King and the rest of his family in England. Here he made himself quite at home, residing sometimes at Twickenham, sometimes in Worcestershire, where he owns a fine estate, and where he devoted much

care to agricultural improvements. He has given considerable attention to literary and historical studies, being known as the author of a "History of the Princes of Condé in the Sixteenth and Seventeenth Centuries," which was published in 1869, and has been translated into English. He joined with his brother, the Prince de Joinville, in a protest against the decree banishing the Orleans family from France, and in 1861 he assailed the Empire in a letter addressed to Prince Napoleon, which excited some controversy, as it occasioned the prosecution of a French printer and a challenge to fight a duel. His eldest son, the Prince of Condé, born in 1845, died in 1866; and his second son, François Louis Marie Philippe d'Orleans, Duke of Guise, died last year, in the nineteenth year of his age. Two years ago, after the overthrow of the Empire, when the French Assembly at Versailles repealed the laws which had exiled the Orleans princes, the Duke d'Aumale returned to France with his nephew and his brothers. He was elected a member of the Assembly, but refrained for the time from taking his seat, in pursuance to an arrangement made between the political parties in favor of constitutional government. It is believed that he kept aloof from the steps lately taken by the Orleanists toward a fusion of their interests with that of the Legitimists, or partisans of the Count de Chambord, thus indicating that although a Bourbon by family ties, he was not a Bourbon in greed of power. In fact, his political course has been such that the Duke d'Aumale has been more than once mentioned as a person who might become President of the Republic, if that form of government were fully established on the basis of secure social order and regular administration. The selection of this prince, as a military man of experience, of extensive knowledge, sound judgment, and high honor, to superintend the trial of Marshal Bazaine, was very generally approved.

The proceedings were somewhat protracted, there being as many as 272 witnesses for the prosecution. The sittings of the court were held in the hall of the grand Trianon palace, which was adapted to the purpose by some alterations. Here the Duke d'Aumale, with six colleagues, seated at a crescent-shaped green-baize table, conducted the trial whose result is well known to our readers.

ANYBODY CAN DO IT.

IT is often stated to us that the reading of character according to the principles of Phrenology and Temperament is so complicated, and requires so much study, that there is little use for persons who do not propose to follow it as a profession to give it any attention with the hope of being able to make it at all useful to themselves. Almost everything that people know has been learned, little by little.* It has not all been pressed upon, or grasped by them at once. We forget how long and difficult was the task of learning to walk or to eat, or to dress and adjust the clothing with facility. Let the pianist, or the mechanic, remember how long and wearily the untrained mind and hands were obliged to labor to master the instrument or the tools. How long did it require to learn to read, spell, and write? It was not all done at once, nor was skill attained until after years of effort.

In the learning of trades boys are usually employed as helpers, and by assisting and watching the operations of the skilled worker the boy's mind becomes trained to know how things should be done; and when, by degrees, he is set to do the simpler processes, he has only to educate his hands to do what for months his head has been learning how to do by watching the work and helping the skilled worker. If an apprentice, just from his books and the plough, were set to weld iron or make a horse-shoe, by no means a difficult or complicated job to him who has had experience, he would soon convince himself and the lookers-on that blacksmithing is an extremely difficult trade, and that it is not his vocation.

As no person can wield the implements of any trade, or perform with skill the work of any art or occupation without time and practice, neither can one "take up" character-reading without some attention to its laws and rules. But one can do something to start with if he comprehend a few simple rules, and with every new head or face he seriously contemplates he will find his skill increasing, until, like the violinist or pianist, he comes to a good degree of ease and excellence in his judgments.

Anybody can see if a head be high or low;

whether nearly all the brain is in the base, or is properly developed in the second and third stories. Is the head wide and selfish? or long, high, and narrow? And is it less intellectual, moral, and social than animal, passionate, and severe? An hour's observation under the guiding mind of one who knows how to talk about heads will enable any tolerably clear-headed person to place people in general in the great classes to which they belong. No person should be deceived as to the outline or general spirit of a stranger—he may not know how to study out complications of character, but he may know the good from the bad, the ingenious from the awkward, the amiable from the quarrelsome and turbulent, and the stupid from the bright and sharp.

If one is to be devoted to professional life as a lawyer, minister, physician, or teacher, or is to engage in business which requires much and varied contact with mankind, such as that of the merchant, speculator, traveler, railroad business, or to stand at the head of affairs in the employment or control of many people, then a more thorough and complete course of culture and instruction in character-reading is desirable.

A man who learns Phrenology thoroughly will thereby double his power in any avenue of business in which molding, guiding, persuading, or influencing men is required. We will give a single but marked instance. The writer, some years ago, was on a train running from St. Joseph, Mo., to Council Bluffs, Iowa. A woman with two little children, from Southern Illinois, was on her way to Fremont, Neb., to join her husband, who had been there for months preparing a home for his family. He had sent too small a sum of money to carry the wife and children through. She offered the conductor her last bank-bill and it fell short some dollars of the amount necessary to take her as far as Council Bluffs. He told her how far the money would carry her, more than a hundred miles short of her husband and home. She did not know what to do about it. She and her children wept together. Several earnest business men in the car, learning the facts, remonstrated sharply with the conductor, and

urged him to take the penniless ones to the end of his route. He maintained that he had no discretion in the matter. They pressed the case, and he told them he knew his business and did not need their advice, much less their dictation.

An hour afterward, as the conductor was passing my seat, which was the one in front of that of the woman and children, I gently addressed him, saying: "You are the youngest man I ever saw in charge of so large and important a train. In the East, older men occupy such responsible places. You must be a self-made man; probably have had no father to protect and provide for you, and have had to work your own way, and perhaps have had a mother and sisters to aid and support, or you would not, at twenty-two, be master of such a train." His eye kindled with an honest pride as he replied, "You have described my case exactly."

"Then you *have* a mother and sisters?"

"I have," said he, as his eye became moist, and his breathing grew deeper.

I replied, "Suppose one of your sisters, with two children, was traveling a thousand miles to meet her expectant husband, in his new home, and she, by miscalculation, were to be slightly short of funds, what would you have a rich railroad company do, through its agent, the conductor of the train?"

His lip trembled, his manly eye filled as he, with broken voice, replied, "*He should put them through.*"

I pointed my finger to the seat behind me; he said "*All right,*" and left the car.

Everybody seemed to know what I was doing, but they heard no loud talking. They saw the result, and rushed around me to learn how I did it. My reply was, "*I talked to his faculties,* and they did the business for him." We then easily raised a few dollars to feed the little brood and forward it from Council Bluffs to its new nest, at Fremont, to meet the lonely mate who was waiting to welcome his dear ones.

Those who ask "What is a knowledge of human nature good for, as taught by Phrenology?" should study the manner of one who understands it, as he passes from one to another, widely differing in disposition, and see how he will bring every one to do the proper thing by almost as many and varied

motives as there are faculties in the mind. Everybody knows that a master of the violin will make it laugh or cry, wail or rejoice. The human scale of faculty is wider and more varied than the musical scale, and he who knows how to touch its chords with skill, can mold men to compliance with any laudable theme or effort.

It is not, then, the professional teacher of Phrenology, merely, who ought to know all that this science teaches, but any one who wishes to mingle with his fellow-men, pleasantly and successfully.

In our annual classes of instruction in Phrenology, Physiology and Physiognomy, are ministers, physicians, lawyers, teachers, and merchants, as well as those who intend to make the subject their life work; information respecting which may be obtained by sending to this office for circulars on the subject. Anybody can learn the science who has common intelligence, and those who come to know human nature in this way will be conscious of having doubled their power and increased their sources of happiness.

COST OF A PRINTING-OFFICE.

THERE are in these United States several thousand newspaper offices, and many new ones are being established, especially in the South and West. In all our new State capitals, county seats, new agricultural colonies, new mining towns, important railway stations, more or less printing is required, and new offices are and will be established by enterprising men. We have had inquiries to answer as to the cost of materials requisite to start a country newspaper. Presuming the information may be useful and interesting to many of our readers, we give below a general estimate as to cost and variety of materials necessary to make a commencement. It will be seen that the absolute amount of capital required is small. It will be safe to add a small percentage for contingencies, accidents, breakages, etc. But the figures we give are according to prices ruling in New York at present.

ESTIMATE FOR PRESS, TYPE, ETC., FOR A COUNTRY NEWSPAPER 20x24 INCHES.

1 Super Royal Washington Press, platen 22½ x 28 inches	\$275.00
1 Super Royal distributor.....	22.50
1 " roller mold.....	21.60
2 " chases, \$12.35.....	24.70
Iron side and front sticks	6.48

2 Single brass galleys, pat. lis. \$2.25.....	\$4.50
3 Common galleys, 75 c.....	2.25
2 6-inch composing sticks, \$1.....	2.00
2 Double stands with racks, \$6.50.....	13.00
8 Pair cases, \$2.50.....	20.00
6 Job cases, \$1.75.....	10.50
Mallet, planer, shooting-sticks, and quoins, say.....	3.50
1 Ley brush.....	1.13
1 Saw and mitre-box.....	2.00
20 Pounds heavy ink, 25 c.....	5.00
50 Brass advertisement rules, 4 c.....	2.00
75 Single dash rules, 10 c.....	7.50
10 Parallel cross rules, 7 c.....	70
10 Double " 7 c.....	70
Column and head rules, say.....	20.00
200 Pounds long primer, 50 c.....	100.00
150 " brevier type, 55 c.....	82 50
50 " nonpareil type, 66 c.....	33.00
Display type.....	15.00
15 Pounds leads, 25 c.....	3.75
Head for paper, say.....	2.50
An assortment of type for blanks and publica- tion, say.....	100.00
Cuts and ornaments, say.....	5.00
1 Marble imposing-stone and frame, 26 x 62 in..	64.00
Boxing and carting.....	20.00
	<hr/>
	\$870.81

For a general job printing-office additional materials will be required, and can always be found, ready made, in this market. Large newspaper presses are made to order, and cost

from \$10,000 to \$40,000 each. Such presses print from fifteen to twenty thousand sheets per hour. A first-class printing-office is a very important, very costly, and a very interesting institution.

The largest manufactory of printing presses and materials in this country, and perhaps in the world, is located in this city. It employs 800 hands constantly. In connection with the manufactory the proprietors have opened a school for apprentices, and employ a teacher, who is present a certain portion of each day in the week for the purpose of hearing recitations and giving instruction. It has been so arranged that each apprentice recites once a week, thus giving him ample time to prepare the tasks laid out for him. Much care is exercised in selecting these apprentices, and they are required to be prompt in their attendance at school. Persistent lack of attention to this part of their duties is punished by dismissal from the employ of the concern.

THE WILL AND FIRMNESS.

IN the January number of the JOURNAL, for 1873, an article on the subject of "Will and Mind" was published from the pen of Dr. Trall, in which he maintains that every faculty has its will or impulse to act in accordance with its nature; and that the activity of any faculty expressing choice or preference is its will.

A reader inquires, "If the will is manifested through each of the organs of the brain, what is the office of Firmness? This question has puzzled me since reading Dr. Trall's article on the Mind and Will."

The organ of Firmness is located on each side of the middle line of the head, at the top and a little back of the center. If a line be drawn from the opening of one ear over the top of the head to the opening of the other ear, it will pass across the front part of the organ of Firmness on the top of the head.

Dr. Spurzheim says, "The effects of Firmness are mistaken for will, because those in whom it is large are prone to use the phrase, 'I will,' with great emphasis, which is the natural language of determination; but this feeling is different from proper volition. It gives fortitude, constancy, perseverance, de-

termination, and, when too energetic, produces obstinacy, stubbornness, and infatuation." Mr. Combe remarks, "Its influence terminates upon the mind itself, and adds only a quality to the manifestations of the other powers. Thus, acting along with Combativeness it produces bravery; with Veneration, sustained devotion; and with Conscientiousness, inflexible integrity. An individual having much Firmness and considerable Tune may persevere in making music. If Tune were greatly deficient he would not be disposed to persevere in that attempt; but if he possess much Causality he might persevere in abstract study. At the same time, Dr. Gall justly remarks that firmness of character ought not to be confounded with perseverance in gratifying the predominant dispositions of the mind. Thus, an individual in whom Acquisitiveness is the strongest propensity, may, although Firmness be deficient, exhibit unceasing efforts to become rich, but he will be vacillating and unsteady in the means which he will employ. He will to-day be captivated by one project, to-morrow by another, and the next day by a third; whereas, with Firmness large, he would adopt the plan which appeared to

him most promising, and steadily pursue it to the end. We may persevere in a course of action from two motives—either: first, because it is of itself agreeable; or, secondly, because we have *resolved* so to act. It is Firmness which gives origin to the latter motive, and enables us to persist with vigor in conduct once decided upon, whether agreeable or the reverse. When this organ predominates, it gives a peculiar hardness to the manner, a stiffness and uprightness to the gait, a forcible and emphatic tone to the voice. The organ is larger in the British than in the French, and the latter are astonished at the determined perseverance of the former in the prosecution of their designs, whether these relate to the arts, sciences, or war. Napoleon I. knew well the weakness of the French character in this point, and in his conversation recorded by Las Cases frequently complained of it.

“In war, the effects of this organ are very conspicuous in the conduct of the two nations. The French, under the influence of large Combativeness and moderate Cau-

tiousness, make the most lively and spirited attacks, shouting and cheering as they advance to the charge; but, if steadily resisted, their ardor abates; and from deficiency in Firmness they yield readily to adversity. The British, on the other hand, advance to the assault with cool determination, arising from great Firmness and considerable Cautiousness and Secretiveness; and, although repulsed, they are not discomfited, but preserve presence of mind to execute whatever may appear most advisable in the contingency. The organ is large in the American Indians, and their powers of endurance appear almost incredible to Europeans.

“When the organ is small, the individual is prone to yield to the impulses of his predominating feelings; when Benevolence assumes the sway he is all kindness; when Combativeness and Destructiveness are excited he is passionate, outrageous, and violent; and thus he will afford a spectacle of habitual vacillation and inconsistency. If love of approbation and Benevolence are large and Firmness be small, solicitation will, with great difficulty, be resisted.”

AGRICULTURAL HINTS.

PRIMITIVE GARDENING.—Taking the Bible account, it would appear that God made a garden before He made man; and this leads us to infer that a good garden must be a good thing. Nor does it follow that we should grow weeds, or apples of discord, but only such productions as tend to give life, health, and happiness.

We also believe that it was originally intended that all men should cultivate the earth. One may raise root crops, another may raise grain, another fruits, or one may combine them all in one great garden. It is no longer a curse for man to earn his bread by the sweat of his brow. Indeed, it is an established fact in physiology that vigorous bodily exercise a portion of the time is indispensable to healthful conditions. Insect, reptile, animal, and man must work to live. Look at the industrious ant, the busy bee, the active bird, yea, and even the majestic forest tree bows its head and bends and twists before the winds of heaven, all in the way of healthful EXERCISE. So *we* should work, and why not in a garden? We can not all be farmers if we would, but we can, most

of us, have at least a rod or two of ground in which to plant and grow flowers, roots, and fruits. We can at least have a *window* garden, and raise vines, plants, and shrubs in pots, if nothing more. And oh, how fragrant, how beautiful are those roses, lilies, and begonias! One feels like petting each bud, sprig, and leaf. How graceful that twining ivy! how it climbs heavenward! We often hear the question, “Do animals reason?” and it may be asked with almost equal propriety, “Do plants feel?”

Now, when it is realized that a considerable part of a family's living may be procured from a good garden at a trifling cost, it follows that it must be a matter of real economy for all who can to have a good garden. To facilitate this matter, and make it convenient for every reader of this to take the necessary steps to secure so desirable an object, we have arranged with one of the best seedsmen in New York to furnish us with just what may be wanted to plant a garden. Vegetable and flower seeds will be sent by return mail, pre-paid, to any post-office in the United States or Territories. Ladies, give your husbands and sons no rest till they

take the necessary steps to have a garden. Gentlemen, secure a promise from your wives and daughters that they will help tend a garden if you procure the seeds and prepare the ground. It will bring roses to their cheeks, sweet breath to their lungs, and warm blood to their hands and feet to work in a garden. Instead of a task, it will soon become a real pleasure to plant, weed, train, water, and fertilize growing plants. In this way we commune with nature and with nature's God. Blessings on the gardener!

AMERICAN FRUIT IN ENGLAND.—The *Garden*, of London, acknowledges the receipt of some apples all the way from Nebraska, "having traveled 2,500 miles before arriving at the seaboard, whence they were shipped to England, and still, as is not unusual with apples from America, in as good condition as if just carefully picked from the tree by hand." Special reference is made to their "firmness of flesh, good flavor, and high brilliant color," and the notice is concluded with this statement and prediction: "Covent Garden was last winter largely supplied with its best apples from the State of New York, and it is not improbable that before another generation has passed away, the orchards of the United States will be able to supply, and supply easily, the fruitless regions of the North, and make up every deficiency of fruit arising in Europe from frost, bad years, and other causes." Here is practical encouragement to our pomologists, and, indeed, no fears may be entertained by those who raise fruits of good quality of not finding sale for them.

CARE OF HORSES' FEET.—Few men who handle horses give proper attention to their feet and legs. Especially is this the case on farms. Much time is spent in rubbing, brushing, and smoothing the hair on the sides and hips, but it is seldom the feet are properly examined. The feet of a horse need as much attention as the body. All the grooming that can be done will not avail anything if the horse is forced to stand where his feet will be made filthy, for in a short time his feet will become disordered and perhaps diseased, and then the legs will get badly out of order, and with bad feet and bad legs there is not much else of the horse fit for anything. Stable prisons generally are terribly severe on the feet and legs of horses, and unless these buildings can afford a dry, clean room, where a horse can walk around, lie down, or roll over, they are not half so healthful and comfortable to the horse as the pasture.

DIVERSIFIED AGRICULTURE.—A Georgian farmer says that he has found that diversified agriculture paid him best. He had twenty-five acres in turnips. His premium acre produced 1,552 bushels, but the average was 1,000 bushels per acre. He planted two pounds of seed per acre, three feet apart, on a clover sod. He used 1,500 pounds of South Carolina phosphate, and 4,000 bushels of stable manure. He broke up the ground ten inches deep, and turned over the sod in June. He found clover and cow peas excellent fertilizers.

THE OCCUPATION FOR IDLE BOYS.—A contemporary, in noticing the swarms of idle and mischievous boys that frequent our larger cities and furnish so many grounds of annoyance to the law and order abiding, very justly remarks:

"Possibly no problem of all the vexatious list tries the judgment of law-makers so severely as that of holding in check the incipencies of crime. To put boys under the proper repression and render it permanently wholesome, is the object of constant solicitude to all thinking, conscientious men. It is not enough that you establish places of detention, when, for a time, all excesses may be checked and tendencies carefully restrained. You must combine an atmosphere of kindness and confidence, which shall move the better instinct of the immature culprits. Instead of forcing the boys into uncongenial trades, give all of them the free training of agricultural pursuits. There is nothing better for the development of mind and muscle at such an age than the wholesome labor of the farm and garden. Five hundred boys could be very profitably employed in the cultivation of a great farm under municipal control. Boys, as a general thing, revolt from the binding necessities of trades, and it would be a wise economy to put them to the free work of the farm."

PLANTING ORCHARDS.—If it is designed to plant out an orchard, the land should be well and deeply plowed, and, if possible, subsoiled. If necessity imposes the choosing of a location which is not a favorable one, from the character of the soil, as regards fertility, some pains should be taken to improve it. To do this well, rotted compost or bone dust may be used, or all or either of these, with such additional supplies of ashes as may be procurable. Plow under, and mingle as well with the top soil as possible. Do not use fresh green manure. If you have no other, it will be preferable to plant your trees and use the manure as a top-dressing afterward. Decide upon the varieties

and the proportions you intend planting, send your orders in time to the nursery, and do not depend upon any chance tree-peddler to take your order. These are not the proper persons to buy from, much less to make selections of kinds for you, even if they send you what they profess.—*Exchange*.

THE toad is a useful animal to the farmer and trucker. He makes a trap of his tongue, which catches insects very rapidly and are swallowed. Old planks left in different parts of the garden will afford them a shelter, and with a little care toads will increase rapidly.

THE evident decline in potato production has caused a marked feeling of anxiety in British agricultural circles, as is evidenced by the recent action of leading Englishmen with regard to it.

A committee, consisting of Lord Cathcart,

Mr. C. Whitehead, Mr. Jabez Turner, Mr. Wakefield, Mr. Brandreth Gibbs, Mr. J. Bowen-Jones, Mr. W. Carruthers, F.L.S., and Mr. J. Algernon Clarke, appointed by the Royal Agricultural Society to carry into effect the suggestions of the judges of the potato disease essays, held a meeting at Hanover Square. They recommended the Council to offer three prizes of \$500 each for disease-proof potatoes. Of these, samples will be distributed among growers in many different parts of England, Wales, Scotland, and Ireland; and the produce of potatoes which resist disease during the first year's trial will be tested for two years longer. With a view of encouraging the production of new varieties, handsome prizes are to be offered also for disease-proof sorts raised from potato plums, to enter into competition in the spring of 1879. [Why not try our Early Vermont?]

WISDOM.

BOOKS, like friends, should be few and well-chosen.

VIRTUE is the race which God has set man to run, and happiness is the goal, which none can arrive at till he hath finished his course with honor.

THE Persians say of noisy, unreasonable talk: "I hear the sound of the millstone, but I see no meal."

FROM the experience of others learn wisdom; and correct thy faults by their failings.

THE money you earn yourself is much brighter and sweeter than any you get out of dead men's coffers.

THE greatest of wisdom is contentment with a little; a contented mind is a hidden treasure, and a sure guard against trouble.

DIOGENES being asked who were the noblest men in the world, replied, Those who despise riches, glory, pleasure, and, lastly, life; who overcome the contrary of all those things, poverty, infamy, pain, and death, bearing them with an undaunted mind. And Socrates being asked what true nobility was, answered, Temperance of mind and body.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

PEOPLE still advertise "for a good girl to cook."

"SAMBO, what is dar dat nebber was, nebber can be, and nebber will be?" "I dunno, Cæsar. I gibs it up." "Why, chile, a mouse's nest in a cat's ear."

A TRAVELER, on his arrival in the city, stopped for a moment to examine a coat hanging in front of a clothing store, when the proprietor rushed out and asked: "Wouldn't you try on some coats?" "I dunno but I would," responded the traveler, consulting his time-killer; and he went in and began to work. No matter how often he found his fit, he called for more coats, and after he had tried on thirty, he looked at his watch, again resumed his own garment, and walked off, saying, "I won't charge a cent for what I've done. If I'm ever around this way again, and you've got any more coats to try on, I'll do all I can to help you."

THE epitaph of a "Resurrectionist:"

"Here lies an honest man, my brothers,
Who raised himself by raising others.
Anxious his friends from soil to save,
His converse still was with the grave,
To rescue from the tomb his mission,
He took men off to the physician;
And strove that all whom death releases,
Should rest, if not in peace, in pieces.
So here he waits his resurrection,
In hopes his life may bear dissection."

VANITY.—The owner of a new mustache was on the down train yesterday morning. He gave up all his attention to his lip. First he would push the contents upward, and then stroke them downward. Again he would pull out the ends, and go through motions calculated to make it part in the middle. Finally a bushy-bearded man in a seat opposite leaned across the aisle, and observed, in a friendly whisper, yet loud enough to be heard through the car: "Don't you want to get one or two good hairs to breed from?" [We know a young man with a mustache, and that is pretty much all there is of him.]



A QUACK PHRENOLOGIST.

TO make a good "take off," the artist must represent life as it is. He may exaggerate and still keep probabilities in view, and show up his victim in a ridiculous light. We take the above from a German almanac, published in Philadelphia. The artist represents a pompous

"Professor" astonishing the old lady by representing the child as a very remarkable being; and that she may expect some time to find him elevated to the office of President of the United States. The mother may be supposed to exclaim, "Dew tell!" or "Sakes alive!" "You don't say so!" After which the "professor" pockets the fee, and turns to admire himself in the mirror. It is believed by many that phrenologists "flatter," and it may be so in some instances. There are counterfeits in this as in law, medicine, and theology; but an honest phrenologist will tell the truth, in kindness, whether it please or *displease*. There is a marked difference, however, between *flattery*—which is false—and *encouragement*, which may

not always be seen by those who are not discriminating. One may be over-confident, and need much restraint; another may be so self-distrusting as to need encouraging, even pushing forward. We hope artists—comic and others—will continue to give attention to Phrenology and phrenologists, and thus help to keep it before the people.

Our Mentorship Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

TELEGRAPHY.—In reply to many inquiries on this subject, we would state, in the language of a telegraph organ published in this city, that to become proficient in the business of telegraphy requires constant, laborious practice for about three or four hours a day during the period of about one year. At the end of that time a can-

didate who has followed this course may be considered capable of taking a first-class position in an office. This is the case with most men, but of course there are exceptions, and often disappointment attends every effort of individuals to master the art. Then, again, plenty of operators have acquired proficiency in six months' hard work, but such cases are rare. As a rule, telegraph operators are either village-bred or have graduated from the ranks of the messenger boys who are employed in every large city office, in numbers ranging from ten to a hundred. Operators are, in general, young men, and if their ages were averaged and compared with those of other professional men, they would undoubtedly be found to be the most youthful class. The reason for this can be easily explained. A boy can become a messenger in a telegraph office at the age of twelve years, and after spending from one to three or four years in this branch of the business the way is open to

promotion, especially if he be a bright, active boy. Operators' salaries range from \$30 to \$40 a month up to \$120. The inferior class are never up to the standard of men fit to fill positions in city offices, and their employment is obtained in the service of railroad companies, or as holders of branch offices in hotels, etc., where business is very slack.

Women are becoming more and more generally employed in this branch of industry, and we regard them as well fitted to pursue it.

DOES GOD ANSWER PRAYER?—Does God govern this world by general and inflexible laws, and has He made such provisions for the welfare of man in his constitution and adaptation to his surroundings in this state of existence as divine goodness and wisdom would dictate? or, has He withheld some of the means of human happiness which He grants as special favors in answer to prayer? Is it rational to believe that the smallest degree of the weal of humanity depends on the capricious prayers of mortals who know not their own wants nor can comprehend the simplest designs of the omniscient Ruler they supplicate? Do men seek physical blessings, such as health and financial prosperity, by prayer, and expect to obtain these except in obedience to the laws provided for their acquisition? Or do they, when they violate any physical law, endeavor to avert the natural consequences of such transgression by supplicating God to suspend in their behalf the pre-existing relation between a particular cause and its effect? Where does inexorable nature cease, and the dispensations of a Providence influenced by prayer begin? If this is a subject which may be elucidated by investigation, will the JOURNAL or some of its thinking readers advance some thoughts on it?

Ans. A law-maker is above and superior to the thing made, may modify, alter, amend, or repeal any law at his will. The finite mind of man may not comprehend the infinite. It may learn much, but, it is presumed, however much it may learn there will be vastly more above and beyond its possible reach which it may not know. Prayer comes of Hope, and is based on or grows out of man's moral sentiments; animals have no moral sentiments, and *they* do not pray. Hope is heavenly; hopelessness is the opposite. We may cultivate either state or condition. "God helps those who help themselves." No sane or full-developed mind doubts the efficacy of prayer.—ED.

PASSIONS OF YOUTH.—How are they to be governed?

Ans. First, parents must govern *theirs*, and their example will be worth something. Then, "line upon line," and "precept upon precept" will be necessary. Children are to be taught self-denial, to govern their appetite, temper, lusts, etc. Those who are properly trained become self-regulating; those who are not, make life a failure.

WEDDING RING.—Why on the fourth finger?

Ans. We are informed that one reason why the wedding ring is put upon the fourth finger of the woman's left hand is because, in the original formula of marriage (in the Latin Church?), it was

placed first on the top of the thumb, with the words, "In the name of the Father;" then on the next finger, with, "And of the Son;" then on the middle finger, with, "And of the Holy Ghost;" and finally on the fourth, with the "Amen."

CHECKERS AND CHESS.—What organs are required to enable one to play chess or checkers? *Ans.* Locality, Eventuality, Form, Order, Calculation, Constructiveness, Firmness, and Continuity.

BIBATIVENESS.—I see the organ of Bibativeness named with the other phrenological organs in your new descriptive chart, but do not see its locality. Where is it located from some other organ?

Ans. It is located in front of Alimentiveness, and makes the organ, as it were, seem wide, farther forward than Alimentiveness usually reaches.

SELF-INSTRUCTION IN PHRENOLOGY.—Please give a plan by which I may acquire a knowledge of Phrenology without a teacher.

Ans. The best "plan" we can give is that set forth at length in "THE STUDENT'S SET," consisting of the phrenological bust, and the best text-books.

CIVIL ENGINEERING.—Will you please name the best school in civil engineering in the United States? as I wish to attend the best. Can you tell me anything about the Polytechnic Institute of Troy, N. Y.?

Ans. The Polytechnic at Troy, N. Y., is probably the best. Address, Prof. Charles Drown, Rensselaer Polytechnic Institute, Troy, N. Y., for particulars.

Is O. S. Fowler still living? If not, at what age did he die?

Ans. We are unable to answer this question. Commentators are not all agreed as to what constitutes death.

PHRENOLOGY AT HOME.—DANCING.—F. V., Corpus Christi, asks: What do you think about dancing? Do you think it is wrong? What does the Bible say about it?

Ans. We think it good exercise, a social accomplishment, and if it were done by day instead of by night, and at home with friends instead of in taverns and drinking saloons, with blacklegs, drunkards, and libertines, there would be less danger of harm. The normal exercise of all the organs of body and mind is acceptable to Him who made all things; but abnormal or *perverted* action of any part is bad. We, however, are not aware of any law *requiring* anybody to dance. If some of the time now spent in educating the heels were spent in educating the hands in something useful, it would no doubt be just as well. As to what the Bible says about it, we beg to refer you to the Book itself. You will find something about "dancing for joy," see Psalms cxlix. 3; Jeremiah xxxi. 13; Lamentations v. 15; Judges, xxi. 31, etc.

Other questions, deferred for want of space, will be answered in our next.

What They Say.

BOSTON GOSSIP OF A GOOD SORT.—

A correspondent writing—not for publication—touches several points of general interest, and we take the liberty to quote:

Evans has been hung. Several more need what will benefit them, and society more. The new year seems to have brought many murders. In most instances rum is the cause, and the murderers and murdered foreigners. And yet our Germans want us to adopt their beer-drinking customs, and the Irish their whisky. We can not and *live* as a nation. Ohio's praying bands seem to be doing much good. We shall have them here soon. Mr. Mowatt's article in *Science of Health* on the Irish is not calculated for the latitude of Boston or New York. Statistics compiled here will not show the Irish in so favorable a light. Full eighty per cent. of our convicts and occupants of alms-houses are either of Irish birth or parentage. They are as lazy with us as the negro is said to be in the South. Very many, on the approach of winter, go to the office of the Board of Directors for Public Institutions, and want to be sent to the alms-house, and others steal or commit some offense, in consequence of which they are provided with board and shelter for the winter. The city of Boston has lately completed the purchase of a lot of land in the southern part of the city for a site for a new poor-house. \$75,000 have already been paid for the land and buildings on the estate, and it is proposed to erect a structure sufficiently large to accommodate 1,000 persons. It is a question in my mind whether the erection of such very good accommodations for the paupers does not increase the number, and I am more than half inclined to believe that every inducement held out but adds to the number of those the steady, thrifty, and temperate classes are obliged to support. [You are right.] I sent you the other day a report of our Chief of Police. The figures therein are very instructive, especially those found under the head of, "A Ten Years' Review of Crime." You will see that Boston is growing better rather than worse; that there are 300 less rum shops than a year ago, 500 less than two years ago; that the arrests for drunkenness are *ten per cent. less* in the last two years than they were in the previous two. Our rummies are trying to turn the law, but they can not. They want their business made legal; nothing under heaven can make it respectable, if heaven can. Numerous hearings have been had, but the class of evidence introduced is of the most worthless kind; many men telling downright falsehoods, but we can not expect anything better from one engaged in a business against which the curses of the Bible are directed. Rum takes away a man's pride, honesty, and, in short, every sentiment the legitimate effects of whose influence tend to nobleness of soul. How sad to think of

that army of wives and children who are dreading, with a horror equaling in its intensity that of a wicked man at the approach of death, the coming home of drunken husbands and parents! Are we, whom a kind Providence has given fathers who touched, tasted, and handled not the accursed thing, half thankful enough for that inestimable blessing of a Christian father? Life is too short in which to do our duty to our Maker for such blessings. I see or hear almost every day some case of hardship that need not have been had it not been for the damning rum shop, and it is my earnest desire that my soul may be always filled with that kind and degree of hatred which we are commanded to have against this demon which leadeth to death. The Siamese twin of the rum-shop is the apothecary shop. Here in W—— (near Boston) the worst place for the sale of liquor was the apothecary's shop. He was notified that if he did not stop the sale he would be cleaned out, and he promised to, as he did not want to be exposed.

The model Governor in the United States is ours. W. B. WASHBURN not only has opinions on moral questions, but expresses them, however much the party leaders desire silence. He knows that where our prohibitory law has been impartially executed, that more than has ever been claimed for it has been the result. For instance, New Bedford has a population of 25,000, and only needs six or eight police officers, and has no places where they sell openly, and but very few where they sell secretly, and as fast as these are discovered they are closed; and yet New Bedford never increased in wealth so much as when the law was thoroughly enforced.

The estimates are coming in from the departments, and they all call for more money than usual, and I am afraid their requests will be granted by the City Council, and taxes increased at a fearful rate. Our city is pressing work on the "burnt district;" our payments, when the contemplated work is done, can not be less than six and three-quarter millions.

A PASTOR'S TESTIMONY.—MR. S. R. WELLS: I presume you have many opinions as to the excellency of your JOURNAL. Yet I must say a few words concerning it—what it is not. It is not a work that aims to feed the mind on wild romance. It is not to be laid away that the children will not see it. It is not poison to the mind of the young or old. It does not encourage vice by the promulgation of crime. It does not deal in soap-bubble theories or flights of the imagination. It does not feed bones to babies, nor sugar-coat just to get you to take them. What it is: Something for all, for all in the house, in the office, in the shop; for the minister, doctor, lawyer, farmer. It is alive, and deals with live, practical questions in a clear, lucid, concise, forcible manner. It treats on facts; it hits the mark. It understands that a pound of wool is as heavy as a pound of lead, but doesn't kill half as quick. In

comparison with many other works, it reminds one very much of the boy who was trying to chop a knot out of a log. He was striking all around it. His father at last said to him, "Strike the knot, my boy." A good blow or two on the knot and the work was accomplished. The JOURNAL, in our opinion, "strikes the knot."

J. T. M'CARTNEY,

Pastor M. E. Church, Weston, W. Va., Jan. 27, '74.

SPIRITUALISM—VIEWS OF A LADY EXPERIMENTER.—Some time ago, two friends of mine were declared to be *spirit mediums*; I had heard much of Spiritualism, and this was my first opportunity to investigate the mystery. In the first *séance* I satisfied myself that the table was moved by no visible agency. Then I asked questions through the medium, to which it tapped in response a certain number of times in designating yes or no. Then I began to question as to the truth of that source of enlightenment; and after testing it long and faithfully, found that it was correct about as often as it was incorrect. I became convinced that if the sin of deception was made up in the mystery, its origin was sin; therefore, God could not approve it, and, consequently, it was a device of the evil one. My friends often laugh at me when I express this opinion; but I am none the less in earnest.

For a long time I amused myself by "cross-questioning the table," as I called it, and enjoyed much healthful laughter at the droll mistakes it made in answering my various questions. The table would not move for the persuasions of the best mediums if I so much as touched it with a finger; and on being questioned as to the cause of this peculiarity, testified that I treated the subject with contempt, in attributing evil to the administering spirits. I felt (say what you please) that I had greatly offended the evil power that moved the table; I generally spoke of it in light terms of ridicule, for I feared that many of the wondering minds around me would be led away.

The strange evidences of this Spiritualism are as hard for one, who has once yielded, to turn a deaf ear to, as it is to the roaring of a lion; indeed, it is like thunder to some, and they can hear nothing else, for the storm of the roaring grows louder, till they are into the rapids and over the cataract into eternity—with whom? Not with God, for they lived in defiance of Him when they trusted to the "spirits of their dead" and others to lead them, instead of looking with an eye of faith to the God who made them.

I am glad that the Rev. Dr. John Hall has written such a good paper on Spiritualism; I am willing to believe his theory. I wish he would, in his wisdom, reconcile the two opinions, for I am very much attached to the belief that it is in some close way connected with the powers of darkness. It is of Satan's cunning to take advantage of man's ignorance, and use as an instrument against God what God had made, as a free agent, with the

power to stand against everything but heaven—all power was given man except the power of God. The possession of the mysterious power to influence the mind is the only stronghold the devil has had from the beginning; and I believe God is well pleased to see that man is discovering that secret in his composition, which the devil has known so well and man has been so slow to learn. Certainly the first deception was practiced on the human mind by the serpent through the means so very ably explained by the Rev. Dr. Hall, in the October number of the PHRENOLOGICAL JOURNAL, and ever since that deplorable day that powerful clairvoyance has been mesmerizing the human mind in order to subdue that spiritual part of man that alone can resist the evil one.

CAMP.

"FOLLOW YOUR NOSE."—Rev. G. W. Powell, of Baltimore, has just been re-elected pastor of the Universalist church, Baltimore, by a unanimous vote, with a salary of \$4,000 a year. From the press of the "Monumental City" we find that Mr. Powell went to that parish a year ago, and found it in a drooping condition. Being a live, strong, broad-minded man, indorsing all good, he at once infused into the old foggy element a new magnetism and a new life. His church is now far too small to hold the crowds that gather there. From a special correspondent we have some notes of his last Sunday evening lecture, upon the trite subject, "Follow your Nose," as follows: "The lecture opened with some mention of different classes of the nose—each class distinctively indicative of traits of character, some worthy to be cultivated, others not. The Roman nose, from time ancient to modern, has been the significant representative of a brave, courageous soul, a nature full of power, full of progress, and success. The ancient artists' best models of manly beauty and vigor presented a large, long nose. The Grecian nose was a clear index to a nature replete with refinement, purity, and all the best ennobling virtues the human heart is capable of sustaining. He referred pleasantly to the Jewish nose, to the inquisitive nose, that is dangerous to follow, as it will lead into other people's affairs, and sundry temptations not compatible with a high standard of man or womanhood. His terse remarks upon the *tooper*-nose were particularly suggestive to genteel drinkers, fashionable tipplers, and young men who sometimes follow their noses into saloons, but are wholly unable to follow it out. The entire lecture was a phrenological exponent of the Godly elements within the human heart that are safe to cultivate and live by. The claim that the nose was one of the strongest indices of character was ably sustained by the bright thoughts, the logical arguments, and beautiful language of the speaker. The people of Baltimore are evidently refreshed with this baptism of new ideas drawn from nature. The world will hear more of S. W. Powell; he is too strong a man to be kept "under a bushel," and will "follow his nose" through life to the credit of himself and his doctrines." L.

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

THE OVERLAND MONTHLY, devoted to the development of the country, \$4 a year. San Francisco: John H. Carmany & Co., Publishers.

The *Overland* sustains the high reputation which it has won in the past, and promises to enlarge upon its sphere of usefulness. Among the contributors to the present volume are Professor D. C. Gilman, President of University of California; Professors John and Joseph Le Conte; Professor George Davidson, and W. H. Dall; Professor T. D. Whitney, of the California Geological Survey; Robt. E. C. Stearns, the Conchologist; Capt. C. M. Scammon, of the Revenue Marine Service; Mr. John Muir; Mr. Stephen Powers, and many of the best writers in the country. We regarded the experiment of publishing a first-class literary magazine in California as of doubtful success, but it has become a success every way, and a credit to the country. The *Overland* considers every material interest of the wonderful West, and is its best exponent.

THE NATIONAL TEMPERANCE ORATOR.

A New and Concise Collection of Prose and Poetical Articles and Selections for Public Meetings, Addresses, and Recitations, together with a Series of Dialogues. Designed for the Use of all Temperance Workers and Speakers, Divisions, Lodges, Juvenile Temperance Societies, Schools, etc. Edited by Miss L. Penny. One vol., 12mo; pp. 288; cloth. Price, \$1. New York: National Temperance Society.

Just the thing for beginners. All young men should learn to speak in public, and what better subject on which to practice than that of Temperance? Here are the materials ready made. The book contains fifty-two excellent prose articles, ninety choice poems, and a series of thirty interesting dialogues.

MORE YALE LECTURES.—Rev. Henry Ward Beecher has delivered his third series of Yale Lectures on Preaching before the theological students at Yale. These are the latest under the Lyman Beecher Lectureship, and are undoubtedly the most important utterances Mr. Beecher has ever made, as this series is on the *doctrines* of the Bible. It is very generally thought that Mr. Beecher is not strictly sound on all orthodox questions; and from his introductory remarks it would be inferred that he has now given to the world views on some of the vital doctrines which he now hardly accepts. This would be gathered also from the fact that his two former courses have been reported by common reporters, but for this course Mr. Beecher insisted on having Mr. Ellinwood, who has reported his sermons for seventeen years, and is, in fact, the only man that ever did

report Mr. Beecher fully and correctly; and from the further fact that he insisted this year that if any report be given with his approval, it should be full and verbatim. His full course of twelve lectures, as reported by Mr. Ellinwood, and revised by, or under the direction of, Mr. Beecher, appears this year in *The College Courant*, the large, official college weekly, published at New Haven, Conn. The subscription price of the paper is \$3 a year; any one can secure the three months' numbers, containing all of Beecher's lectures, for \$1.

SUFFOLK COUNTY, NEW YORK. Historical and Descriptive Sketches of its Towns, Villages, Hamlets, Scenery, Institutions, and Important Enterprises. With an Historical Outline of Long Island from its first Settlement by Europeans. By Richard M. Bayles. One vol., 12mo; pp. 434; cloth. Price, \$2. Published by the author, Port Jefferson, L. I., New York.

An historical reference book. Old and young Long Islanders will be thankful for so much real information.

THE ELOCUTIONIST'S MANUAL, No. 2, comprising New and Popular Readings, Recitations, Declamations, Dialogues, Tableaux, etc., etc. Edited by J. W. Shoemaker, A.M., Conductor of the Elocutionist's Department in the *Schoolday Magazine*, Principal of the Philadelphia Institute of Elocution and the Languages, Professor of Elocution in the Wagner Free Institute of Science, Lutheran Theological Seminary, Waynesburg College, etc. One vol., 12mo; pp. 193; muslin. Price, 75 cents. Philadelphia: J. W. Daughaday & Co.

A good investment for those seeking the best models. Were a copy presented to every youth in America, we should have a crop of young orators. Then why not? —

THE CATHOLIC WORLD, a Monthly Magazine of General Literature and Science. Octavo; pp. 140. Terms, \$5 a year, in advance. New York: The Catholic Publication House.

The number for January, 1874, is No. 106, volume XVIII., and contains its usual amount of reading, consisting of serial stories, of which two are concluded in this number, and essays on Roman Catholicism, etc. A paper on Madame de Staël closes with the following: "French annals furnish a study, almost unique, of womanly virtues, and yet by their brilliancy, wit, and conversance with public affairs were fitted to be the advisers of rulers and statesmen. We are very far from wishing to see the sex drawn out of their proper sphere, but when by natural and acquired talents they evince a vocation for affairs of State, we think that Governments may wisely accept their counsel, and that their services are worthy of permanent record." [What a concession to woman! woman, the mother of the human race! Well, let us be thankful for so much.] —

THE WHITE ROSE. By Mary J. Hedges. One vol., 12mo; pp. 320; cloth. Price, \$1.25. New York: National Temperance Association.

A beautiful story, well adapted to Sunday-school libraries.

A small poster under the following title is issued by the National Temperance Society, New York: "Advertisement of the Honest Rumseller—As it Should Be!" Then comes the Advertisement, as follows: "Friends and Neighbors: Having just opened a commodious shop for the sale of 'Liquid Fire,' I embrace this early opportunity of informing you that, on Saturday next, I shall commence the business of making drunkards, paupers, and beggars for the sober, industrious, and respectable portion of the community to support. I shall deal in 'familiar spirits' which will excite men to deeds of riot, etc. I will cause mothers to forget their offspring, and cruelty take the place of love. I will sometimes even corrupt the ministers of religion, etc. The spirit trade is lucrative, etc. I have a license, and if I do not bring these evils upon you, somebody else will. I live in a land of liberty. I have purchased the right to DEMOLISH the character, shorten lives, etc. I pledge myself to do all I have herein promised." The above extracts from the poster show its character.

ARKANSAS.—The State Legislature did a wise thing when it passed an Act ordering a third edition of 25,000 copies of Mr. James P. Henry's excellent book, in pamphlet form, entitled,

RESOURCES OF THE STATE OF ARKANSAS, with description of counties, railroads, mines, schools, etc., and is sold at 50 cents a copy by James P. Henry, Little Rock, Ark.

Would the reader know all about the soil, climate, rivers, hot springs, fruits, crops, forests, minerals, stock-growing, manufactures, and how to reach that young, rich, and enterprising State, let him secure a copy of this book.

THE DUMB TRAITOR: A Story of "Keeping Alive by Stimulants." By Margaret E. Wilmer. One vol., 12mo; pp. 332; muslin. Price, \$1.35. New York: National Temperance Society.

A capital temperance story, written and published in the excellent taste of this most useful society. The book should be placed in every Sunday-school, district-school, and household library, accessible to all who read.

THE NEW CHURCH ALMANAC FOR 1874. Octavo. Price, 15 cents. Chicago: Weller & Metcalf.

Worth twice the money to those interested in Swedenborgianism.

THE ATLANTIC ALMANAC, 1874. Large octavo; pp. 80. Price, 50 cents. Boston: James R. Osgood & Co.

As usual, this issue of the Atlantic Almanac has a table of most attractive reading matter, intermingled with numerous illustrations of the choicest character.

THE AMERICAN BUILDER. When this journal was started in Chicago a few years ago, we were delighted, supposing we were to have some-

thing like the LONDON BUILDER, which is a most worthy publication. But we confess to a sad disappointment. After struggling for a time in Chicago, living mainly on advertisements, it was removed to New York, where it is now published. It has something like sixteen pages of reading matter—including its own business "puffs"—and *fourteen pages of advertisements!* Is not that business smartness? We presume its circulation to be small, and hence must derive its support from those who are willing to contribute, in the way of paying for advertising in its pages. To make a good magazine requires something besides "brass" and a broken-down preacher.

JOHN P. FURNISS, M.D., of Selma, Ala., has written an essay on the Anatomical and Physiological Peculiarities of the Negro, read before the Dallas County Medical Association. We shall look for a copy of this essay with considerable interest.

TEMPERANCE TRACTS.—A High Fence, of Fifteen Bars, which the Rumseller Builds Between Himself and Heaven. By the author of "Lunarius."

THE THRONE OF INIQUITY; or, Sustaining Evil by Law. A Discourse in behalf of a Law Prohibiting the Traffic in Intoxicating Drinks. By Albert Barnes.

SUPPRESSION OF THE LIQUOR TRAFFIC. A Prize Essay. By Rev. H. D. Kitchel, D.D.

DREAM OF THE RUMSELLER'S WIFE. Influence and Effects of Social Drinking Usages Among Women. By Stephen Smith, M.D.

THE CRIMINALITY OF DRUNKENNESS Judged by the Laws of Nature. By Elisha Harris, M.D.

THE RELATIONS OF DRUNKENNESS TO CRIME. By the same.

WHY WE OPPOSE THE TRAFFIC. By Rev. A. Sutherland.

Published by the National Temperance Association, New York. Send fifty cents or a dollar and secure a quantity to give away.

MR. HENRY CARY BAIRD has recently published, in pamphlet form, the following, at 10 cents each:

LETTERS ON THE CRISIS, the Currency, and the Credit System.

THE PRESENT SITUATION, and How it should be Met; A Temporary Loan the Remedy; Impossibility of Specie Payments; Advantages to the People from Three Sixty-five Convertibles, by Judge Kelly.

THE FINANCES: Views of the Hon. William D. Kelly, M.C., Oct. 30th, 1873 and Nov. 4th, 1873. In letters to the Philadelphia press. Copies sent first post on receipt of price.

MANUAL OF MYTHOLOGY. For the Use of Schools, Art Students, and general readers. Founded on the Works of Petiscus, Preller, and Welcker. By Alexander S. Murray, Department of Greek and Roman Antiquities, British Museum. With 35 plates on toned paper, representing 76 mythological subjects. 12mo; cloth extra. \$3.—Scr.

NEW ENGLAND: a Hand-book for Travelers; with the Western and Northern borders, from New York to Quebec. \$2.—Os.

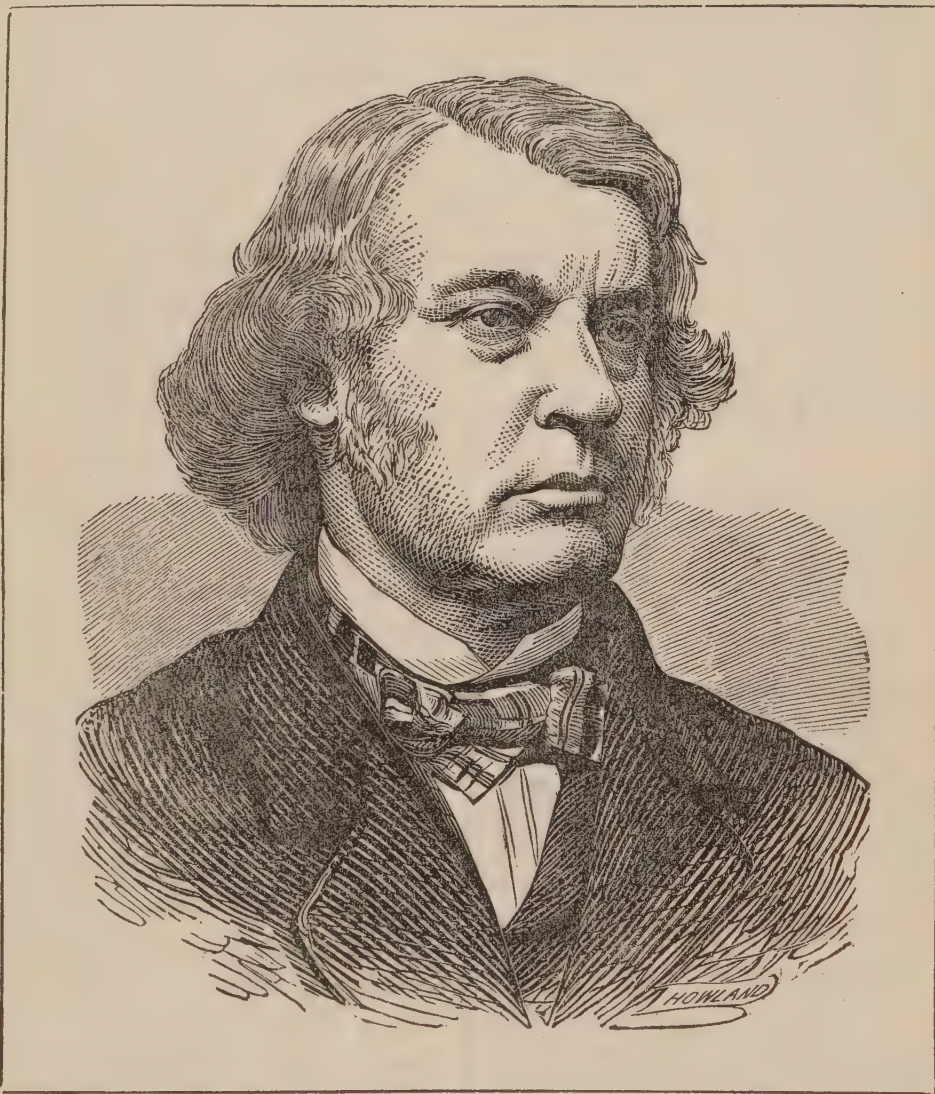
THE PHRENOLOGICAL JOURNAL

AND
LIFE ILLUSTRATED.

VOL. LVIII.—No. 5.]

May, 1874.

[WHOLE No. 425.]



CHARLES SUMNER.

WHAT says Phrenology of Charles Sumner? This: his brain was large, measuring nearly twenty-four inches in circumference, and high in proportion. It was of fine quality, well-formed and well-sustained by a splendid vital system. His tem-

perament comprised the motive, mental and vital elements in nearly equal proportions. He stood six feet high, weighed from 175 to 180 lbs., and was generally temperate in all respects, save in that of almost incessant mental activity. With the exception of the

times when suffering from the consequences of certain physical injuries, he was generally sound and healthy. His constitution was remarkable for flexibility and endurance. Returning to the brain, we find first, a large frontal lobe—which our engraving fails properly to represent—with the reflectives and percepts about equally developed. We find also large Language. The head is high in the crown, showing Self-Esteem, Firmness, Approbativeness, Conscientiousness, and Hope all large, while Veneration and Spirituality are less strongly marked. The upper side-head, embracing Cautiousness, Sublimity, and Ideality were large. Acquisitiveness, Secretiveness, and Constructiveness were fairly marked, but not so influential as those before mentioned. In the base of the brain we find very large Combativeness, moderate Destructiveness, large Adhesiveness, and other social organs fully developed.

In addition to a powerful frame, a strong body, a large brain, and a very active temperament, we have a highly educated and thoroughly disciplined mind. Among all our modern statesmen none surpassed Mr. Sumner in these respects. *His mental powers were always available.* He was clear and quick in perception, broad and far-reaching in intellect, prompt, resolute, and dignified in action. The embodiment of integrity, he was a man of purpose and of power. Was he censorious? He was a clear and critical reasoner, and with large Conscientiousness and Combativeness, he did not “sugar-coat his pills.” He was honest and uncompromising; he was manly, dignified, aspiring, proud-spirited, and determined. No one would ever approach him with a view to bribery or corruption. Being learned, scholarly, and a fine speaker, he became early in life distinguished as an orator. But he was no less bright as a writer, than capable as a thinker and speaker.

The true character of the man may be seen in all his acts in all his life. He was true to himself, true to the objects he had in view, true to his friends, and all the ends and aims of his life were in the line of a stern sense of duty.

With more French suavity, and more of a compromising spirit, he would have been much more popular. But he was a statesman, not a mere partisan politician. He was the *maker* of creeds, not their subject. In his statesmanship he did not confine himself to States, or even to a nation, but rather to the races of men, and to the world. His sympathies were broad enough to comprehend mankind, and he would legislate for all. With him the question was, in the sight of Heaven, “WHAT IS RIGHT”?

Charles Sumner was born in Boston on the 6th day of January, 1811. On his father's side one ancestor, Job Sumner, bore a notable part in the early days of the Republic. His father, from 1825 to 1839 high sheriff of Suffolk county, possessed no little ability as a lawyer, and also as a writer of essays and poems. Charles was prepared for college in Phillips' Academy, and in 1830 entered Harvard, where he was graduated the same year. Choosing law as his pursuit, he entered the Law School at Cambridge a year later. There he formed a friendship with Judge Story, which lasted until the latter's death. He was admitted to the bar in Worcester in 1834, but began practice soon after in Boston. Literature having a strong attraction for him, he became the Reporter of the United States Circuit Court for Massachusetts. Besides this he lectured for three years before the Law School, in the absence of Judge Story. He went to Europe in 1837, remaining three years, during which time he traveled in France, Italy, Germany, and England, studying the legal systems of those countries, and making the acquaintance of prominent public men whose names are historical.

On his return to Boston he resumed the practice of his profession, but was little disposed to take part in the conduct of suits, preferring to study the literature and science

of law. In 1843 he again resumed the position of lecturer at the Cambridge Law School, and the following two years issued his edition of *Vesey's Reports*, in twenty volumes, a work conceived and executed in his happiest spirit. He also edited and published two or three light treatises, and the *American Law Jurist*, a quarterly. When Judge Story died in 1845, hoping that the young student he had trained would succeed him in the Professorship of the Law School, Charles Sumner had just chosen another path of life. He delivered his oration on the *True Grandeur of Nations*, before the Boston municipal authorities, on the Fourth of July, 1845, and from that day dates Mr. Sumner's career as one of the leading figures in the history of the anti-slavery struggle.

He threw himself with such enthusiasm into the conflict, and advocated such radical measures, that his utterances alarmed the Whig party, of which he was a member.

The Pro-Slavery Democracy was then all-powerful; the Whigs were, in the mass, timid of going to an extreme length in opposition to it, and Mr. Sumner withdrew from them and joined the "Free-soilers," who favored the election of Mr. Van Buren to the Presidency in 1848. Gen. Taylor, however, was elected, died, and was succeeded by Vice-President Fillmore. The Fugitive Slave Bill was passed, was signed by the President, and the whole North was thrown into a paroxysm of fury. One of the best speeches made against this measure was Mr. Sumner's oration before the Free-soil State Convention at Boston, in October, 1850. It produced the deepest impression on those who heard it, and tended to keep alive the strong resentment with which the Northern people always regarded the odious statute. On the 24th of April, 1851, Daniel Webster having vacated his seat in the Senate to enter Mr. Fillmore's Cabinet, Mr. Sumner was elected United States Senator by a coalition of Free-soilers and Democrats, after a contest of extreme severity. Mr. Sumner took his seat in the national councils firmly pledged "to oppose all *sectionalism*, whether in unconstitutional efforts by the North to force freedom into the slave States, or in like efforts by the South to carry slavery into the free States, or to extend it over the national Government." His

first effort in the Senate was the celebrated speech on the 26th of August, 1852, entitled, "Freedom National, Slavery Sectional." Two years later he made another great speech against the Kansas-Nebraska bill. It was in this speech that he denounced the bill as at once the *best* and the *worst* measure which Congress had ever acted on. On the 26th and the 28th of June of the same year, in the debate on the Boston memorial for the repeal of the Fugitive Slave Law, Mr. Sumner replied in the most scathing eloquence to Messrs. Jones of Tennessee, Butler of South Carolina, and Mason of Virginia. In this way he became the recognized leader of the Anti-Slavery party in the Senate. In May, 1856, occurred the memorable debate on the admission of Kansas as a State. In the course of his speech Mr. Sumner denounced the crime of slavery with such unsparing severity and sarcasm, that the Southern members in Congress became furiously incensed. Two days after its delivery, while Mr. Sumner was seated in his chair in the Senate, after adjournment, busily writing, he was attacked by Preston S. Brooks, Representative from South Carolina. Armed with a heavy cane, Brooks struck his unobservant victim a powerful blow on the head, felling him unconscious to the floor, and then continued his blows. Mr. Keitt and other Southern Congressmen sustained Brooks against immediate interference. The effect of this occurrence on the country was startling. From East to West one universal cry of indignation arose, and the attack probably did more damage to the Democratic party than even the Fugitive Slave bill.

The injuries of Mr. Sumner were of the most dangerous character, and resulted in long-continued disability. He sought quiet and repose in Europe, where at Paris, under the treatment of the best medical skill, he was finally restored to health; but his nervous system had received a shock from which it never wholly recovered. Meanwhile Mr. Sumner had been in 1857 almost unanimously re-elected to the Senate by the Massachusetts Legislature, and on his return from Paris he resumed his seat, and it was soon discovered that he had lost none of his old spirit and energy in his chosen field. In the Presidential canvass which resulted in the

election of Abraham Lincoln, Mr. Sumner took an active part; and in the debates in the Senate which finally led to that last attempt of the South to perpetuate the system which their great opponent had spent his life in destroying, and during the war which followed, Mr. Sumner stood up as the enemy of compromise or concession in any shape or form.

When the war had been closed and Congress turned its attention to measures for the restoration of the Southern States, Mr. Sumner appears to have watched with close interest every plan introduced, and he stood prepared to oppose any and everything which might seem, however remotely, to militate against the perfect freedom and equality of the colored race under the law. His principle was that by investing the negroes in the conquered States with all the rights that the white citizens enjoyed, national authority would be placed on a more secure foundation than by any other method.

In the proceedings of 1866 and 1867, which were chiefly marked by the attempts of Mr. Johnson to force his theory of reconstruction on Congress, and his frequent vetoes of important measures that had obtained legislative sanction, Mr. Sumner was a conspicuous figure, and in the celebrated impeachment trial he also took a leading part. Subsequently to that trial he made but one important speech, that on the Alabama claims, although at all times strictly attentive to his duties as a Senator.

In private life Mr. Sumner was eminently upright and pure. He was a man of abounding industry and wide literary tastes. He married late in life, but the marriage was not a happy one, and his wife separated from him and lived in Europe. The reasons for the separation have never been made known, but Mr. Sumner submitted the case to two or three of his warm friends, among whom was the late Mr. Greeley, who decided that he had acted under the circumstances with all the delicacy and courage of a man of high honor.

A writer in the New York *Herald* thus speaks of the deceased statesman:

"There was a solemnity, a stern beauty about his death in keeping with his character. He died virtually in the Senate Chamber. The day before his death Massachu-

setts, which he loved with the fervent passion of a son, had publicly withdrawn the censure passed upon him for certain opinions expressed in reference to the war. He died also from the effects of the cruel outrage inflicted upon him by a frenzied South Carolinian, and, not unlike Lincoln, was in a certain sense a martyr to Liberty. He was the oldest Senator in point of continuous service; for, although Mr. Cameron and Mr. Hamlin were members of the body before his election, their services have not been continuous. His Senatorial service was of a chivalrous, almost a romantic, character. He entered the Senate accompanied by Chase and Hale, alone, despised, contemned, abused, to fight the battle of freedom. Alone he fought it; for while Chase and Hale were as sincere in their anti-slavery convictions, with him it was an earnest, burning passion, growing into intense anger. We are not far removed from that time, but even now it is hard to comprehend it. The Southern statesmen had commanded the Republic for many years. * * * They had before encountered Northern statesmen, gifted men, too, like Choate and Webster, and Everett and Buchanan, but they had come to serve and not to disobey. No public man from the North had ever entered the Senate Chamber without swearing allegiance to the royal power of slavery, without, we fear, being too willing to take the oath, or any oath, however dishonorable, to "preserve peace." And the South meant that there should be no peace unless slavery was respected as a sacred institution above the Union and the Constitution, as the very corner-stone of the Republic. * * * Sumner held a different tone from that of any Senator who had preceded him. He came as Castelar into the Cortes of Spain—as Gambetta into the Imperial Assembly. In Continental political speech he was an 'irreconcilable;' he would have no compromise, would war upon slavery as a crime, a perfidy, a dishonor to the Union. He never concealed this purpose or moderated it. There is the fervor of the Hebrew prophets of old in the declarations of his early speeches [Here we see the true character of the man, when he said]: 'By the supreme law which commands me to do no injustice; by the comprehensive Christian

law of brotherhood; by the Constitution which I have sworn to support, I am bound to disobey this act! Never, in any capacity, can I render voluntary aid in its execution! Pains and penalties I will endure; but this great wrong I will not do! Better suffer injustice than do it! Better be the victim than the instrument of wrong!

These words were spoken at the outset of Sumner's career, but they give us the temper of his life. In every controversy, and many came to him during his twenty-three years of duty, he took the same tone. When the Kansas-Nebraska question arose, he carried into the debates an acerbity, a scornful anger and plainness of speech which sound strange in these calmer times. It is difficult to imagine the scholarly and accomplished Sumner speaking of another Senator as a skunk. Yet this was the term he applied to no less a man than Stephen A. Douglas. Ah, those were sad, earnest, angry, heart-burning days, fitly preluding the terrible hours of combat and fury that were so soon to come! It was this debate that led to the atrocious assault of Preston S. Brooks, which made Sumner's further life a torture, and finally caused his death. It is well to remember that this anger, and more especially the extraordinary severity of speech which exasperated Brooks, did not originate with Sumner. The violence of the Southern Senators, of Toombs, Davis, Wigfall, Butler, and the others, is inconceivable now. Sumner fought with the weapons of the controversy. Nor did he disdain the manner of the strife; for, like Burke, rhetoric was only pleasing to him when it gave force to his speech. It was the spirit of Cromwell, of Jonathan Edwards, warring upon a crime; and, reading his speeches now, we are struck with their spirit of prophecy. "You have made all future compromises impossible." "There will really be a North, and the slave power will be broken." "The great Northern hammer will descend to smite the wrong." "I penetrate that 'All Hail Hereafter,' when slavery must disappear." "I discern the flag of my country as the flag of freedom, undoubted, pure, and irresistible."

"These were indeed prophecies! Hebrew in their plainness, and they show us the spirit that won Gettysburg. This is the part of

Sumner's life upon which we love to dwell; for here we see its fullness and splendor, its wide, unbending sincerity. He resembles no man so much as Burke, not only in his character, but in his career. Like Burke, Sumner possessed the widest range of knowledge. Like him, he made a furious, implacable war upon tyranny and crime."

Rev. James Freeman Clark said that Charles Sumner was the most unpopular of all our great men. "He was eminently what politicians call 'an impracticable man'—that is, a man who can not be induced to sacrifice his principles to the success of his party. This large, warm heart, longing for sympathy, and prizing friendship so highly, was continually misunderstood, and was very much alone." "His fidelity to principle cost him dearly. Many disliked Sumner because he kept himself on the upper level of principle."

"Once," said Mr. Clarke, after speaking of the cowardly assault of Brooks, "while Mr. Sumner was here in Boston, still suffering from those injuries, I called at his house in Hancock Street. He was resting in an easy chair, and with him were three gentlemen. He introduced them to me, one as Captain John Brown, of Ossawatimie. They were speaking of this assault by Preston Brooks, and Mr. Sumner remarked: 'The coat I had on at that time is in that closet. The collar is stiff with blood. You can see it if you please.' Captain John Brown arose, went to the closet, slowly opened the door, carefully took down the coat and looked at it for a few moments with the reverence with which a Roman Catholic regards the relics of a saint. Perhaps the sight caused him to feel a still deeper horror of slavery, and to take a stronger resolution of attacking it in its strongholds. So the blood of martyrs is the seed of the church."

Mr. Beecher spoke of Mr. Sumner as "the representative man of that reactionary spirit which had saved the nation. God worked largely in him," Mr. Beecher said, "for the benefit of the nation, and he died in the right place."

Dr. Storrs said of the dead Senator: "A minister thinks as other men do, and when he stands over the coffin, the virtues of the dead are ever present with him. Here was a

man of intense convictions, who repelled many, made many enemies, was thought by many to be egotistic and passionate, and who often roused the most intense antagonism. Now he is dead, and the very men who spoke of him with hate speak of him almost with love. He was a man with a grand principle to serve."

From the *Golden Age* we quote:

In all that can make a public character admired, beloved, and revered, Charles Sumner was endowed lavishly; first by the gifts of Nature, then by the advantages of fortune, and last by that more capricious, yet not less powerful, influence which may be called the spirit of destiny, or the genius of a career.

What a rich catalogue of elements go to make the sum total of all that death now consecrates in the name of Charles Sumner! What personal gifts and graces—beginning with the comely tower of his physical frame, which in itself adorned the Senate Chamber like some work of antique art! What a noble mind sat like a chapter on this pillar, crowning it as with a Corinthian scroll! What a library of learning was stored within his capacious brain—a crowded granary of harvests from all tongues and times! What a skill of speech and pen he acquired—showing the cunning workman's most facile touch! What solidity of judgment he evinced! What gravity of behavior he maintained! What majesty of moral force pervaded all his faculties and dictated all his acts! What a position he was enabled to fill as the chief Senator who bore the standard of human rights during a prolonged term of service which a favoring Providence cast for him in just that period of our history in which he was most fitted to shine!

* * * *

Among all contemporary statesmen, not only in this country, but in Europe, he achieved what we regard as the noblest of political reputations; nor has political life in any age of the world ever developed a superior character.

The only danger that now menaces this great fame is the fact that its colossal proportions demand that it shall be judged by colossal tests. There is a divine democracy in human nature by which the majority of

mankind instinctively forbid any one of their number—however great and masterly—to

"Get the start of this majestic world,
And bear the palm alone."

When men tower up into the upper ranks of greatness, we insist that they shall be measured by the heroic mold. It is itself a sufficient fame to be required to submit to this measurement. Charles Sumner must be gauged by this, and by no other. It is idle to judge him by any ordinary standard, for he transcends it.

If one of our many eloquent Senators ends an oration in the Senate and takes his seat amid the applause of the Chamber, he is congratulated on having made what is called a great speech. And yet the judgment which bestows this verdict does not stop to make comparison with Cicero or with Chatham. The award is adjudged by a lower standard. But in Mr. Sumner's speeches there is a towering ambitiousness which—if not in their realization of a perfect eloquence, yet in their aspiration toward it—necessarily puts their author into a forced comparison with the world's brightest lights of rhetoric and literature—with the chief and master spirits who rule ancient and modern tongues. This comparison Mr. Sumner can neither evade nor abide; for though no man has spoken in our time whose words have challenged wider attention than his—so that it might be almost said that Charles Sumner's speeches were historic events; and though no other American orator has bequeathed in choice English so many studious orations to the care or the neglect of the next generation; yet—judging Mr. Sumner by the only standard that we are willing to apply to him—these works do not seem to us to bear evidence of the continuing and immortal fire of

"Thoughts that breathe and words that burn."

So, too, he had his limitations in other directions; for example, in a deficiency of that practical statesmanship which knows how to shape—and, above all, knows how to carry, the fitting measure for the present hour.

We freely admit, therefore, that in these practical, and in some other important respects, Mr. Sumner had his superiors among the many able and few great men who sat about him in the Senate.

Nevertheless, take him for all in all—judg-

ing him by any test, whether the supreme or the common—Charles Sumner now goes into history as the most illustrious man who ever sat in the American Senate. Clay out-charmed him in eloquence; Webster outweighed him in intellect; Calhoun outshone him in brilliancy; but Sumner outranks

them all in the sum-total of his gifts, his learning, his labors, his devotion to liberty, his moral majesty of character, and, consequently, in the historic luster of his name.

It is his peculiar greatness to have been great in those qualities which are of the greatest rank in human nature.

Physiognomy, or Signs of Character.

Of the soul, the body form doth take,
For soul is form, and doth the body make.—*Spenser.*

CONVERSATIONS ABOUT FACES—NO. 4.

CONTRASTS OF CHARACTER.

AGASSIZ, VANDERBILT, FIELD, DICKENS, BEECHER, EUGÉNIE, WASHINGTON—FACE AND VOCATION.

BY L. E. L.

“THE photographer is doing a great work for us,” said my brother, as he sat looking at two pictures of Agassiz, one taken twenty-five years ago, the other within a year. “In a little while we shall have the history of our great men sun-painted as fast as it is made. In fact, we have it now in many instances, and I want you to look at these faces I have arranged. This photograph of Agassiz, twenty-five years ago, is more a prophecy than a history. True, at thirty he had accomplished much, but the face suggests rather great capabilities than great achievements. Then full of hope, of boundless enthusiasm and devotion to the work of his life, he was at the beginning of his career. In the second face we see how his successes molded him; how he grew in knowledge and in power, and in the consciousness, too, of the strong hold he had upon the heart and intellect of this nation. What a sunny-tempered man he was! This first face is full of June sunshine; the last of autumnal glory.”

“But can you see,” I asked, “any definite change in the lines of the two faces?”

“Look,” said my brother, “at the line of the brow, and you will see that the constant use of the observing faculty has made the brows more prominent in the second picture than in the first, otherwise the lines in the two faces are the same, only deepened and intensified in the second. On neither

face is the slightest trace of \$, that character stamped so deeply into many an otherwise noble physiognomy. If you want to see this for yourself, look on this picture and on this,” saying which my brother quietly put the last picture of Agassiz between Vanderbilt on the left and Jim Fisk on the right. “Now what do you read?” said he.

“I read,” said I, “in the right and left bower, an intense appreciation of material wealth for its own intrinsic value, and, as I still look, Agassiz’s face is full of a severe, sublime, yet mild reproof. He chose the true riches, and will grow evermore in honor as they lapse into forgetfulness. Had they but associated their wealth with his renown, they, too, had been remembered forever.”

“Vanderbilt has founded a college, you know,” said my brother.

“Yes,” I replied, “the wisest thing he ever did.”

“These three faces of Cyrus Field are studies. In the first he stands, as you see, by a globe, demonstrating the possibility of the cable. Very grave and earnest is his face, with eyes having the same expression as the eyes in the portraits of Columbus. He believes in his inmost soul that the ocean Columbus crossed he can span. Oh, if he can but make others believe in it as he does!

“In the second picture, that darling cable of his lies in two pieces at the bottom of the

Atlantic ocean. What mighty toils, what splendid achievements, what fervid hopes have ended in disaster, defeat, and rupture! Here he looks like Napoleon at Waterloo, yet with power and resolve to reverse the decision of his Waterloo.

"But what a contrast to the other two is this third picture! His name and his fame the pride of two hemispheres, his fortune vastly more than retrieved, and he a welcome guest at the court of kings, and evermore to be held in lasting and honorable remembrance among men. No wonder the face breaks into a smile, no wonder delight a thousand-fold accrues from all the failure of hopes, the crushing of enterprises, the strokes of disaster that, at the last, have been transformed into abounding joy, splendid success, and crowning victory.

"Here is Dickens as he came to our shores thirty years ago, young, elastic, with the rich consciousness of infinite power to please, and his lips still wet with the first sweet draughts from the chalice of popular applause. In the pictures of him as we saw him last his powers are developed, but care sits on his cheek. He does not look like a happy man, or an amiable man. Something troubles him; what is it? The inlaid ghosts of Quilp, the haunting memory of little Nell, or disappointment in his domestic life?

"Here are several faces of Beecher, this one taken when he first came to Brooklyn; look at it! boyish, confident, aspiring, daring, hoping all things, believing all things. Nothing daunts him, and, regardless of custom or prejudice, he marks out the course that to him seems just and right and sensible. In some of these later pictures he looks jollily defiant as, intrenched in the hearts of his people, and supported by the better sense of community, he laughs at the jeers and hisses and arrows of his enemies. But in the last sun-painting done for him we find traces of many a weary conflict from without and from within, many a heavy hour of watching and prayer, many a weighty burden borne in silence and laid at the Master's feet. His face deep scars of thunder have intrenched, but the light in his eyes is the same, and the words on his lips lift the listener nearer than ever to his Maker.

"Look at these four pictures of Eugénie;

would that we had one of her as she is now! In the first we see her as she was when Napoleon first saw her, a violet with the dew in it, fair and sweet, and unconscious of her powers. In the second picture, that side face so familiar to all collectors of photographs, we see her as she was in the early days of her empire, the acknowledged belle of Europe, infinite in her power of pleasing, and infinitely rejoicing in that power. Never was a woman so beautiful and in so high position freer from hauteur or self-conceit. She aspires only in this picture to reign over the heart of France. The third picture was taken while her husband was in Italy, and she was regent of the Empire. There is a consciousness of regal power in her attitude and bearing, and yet one can see that she is only playing empress. A magnificent figure-head she is, and she claims to be nothing more. In the fourth picture she sits with her right elbow on the table, her cheek resting upon a hand, while her son, the Prince Imperial, leans confidently against her knee, and her left hand is on his shoulder. This picture is all mother. Her sum of hope and all her joy is centered in this bright-eyed, handsome boy. For his sake she wears the diadem, and rejoices in its power. In all human probability he will be Napoleon IV. Sedan is not dreamed of. Chiselhurst is in a foreign land. The sky above is all bright; not a cloud as big as a man's hand can be seen in the horizon. Happy, indeed, is it for us that we do *not* know what a day will bring forth! Could we see into the future, how would all the joys of the present vanish from some of our hearts!"

"Here are some pictures," said I, "that everybody knows about. Only a few favored individuals can get successive photos of distinguished people, but almost everybody can have portraits of Washington at different periods of his life."

"A very good thought on your part," said my brother. "Now arrange these in chronological order. Here is one of the first pictures we have of the great chieftain, his portrait when he took command of the army in 1775. In this face the record is simply that of a pure and noble life. There are great capabilities in the face, chief among which are ability and fidelity in the dis-

charge of important trusts. This man's conviction of duty will keep him evermore vigilant, his sense of responsibility will stimulate every faculty to its highest exercise, his quick and a most infallible judgment of men, for Arnold was the only man in whom he was ever deceived, will enable him to supplement his own want of knowledge and experience with that of the best men around him, and we all know how much Washington took counsel with his associates. In these later pictures we see how the vast responsibilities he bore marked him, and crowned him the chiefest man of modern times."

"It's very pleasant to study picture faces," said I; "but, after all, one learns more from living studies, from eyes that glance and lips that move, from heads that turn and features that continually change their expression, than from all the photographs in the world. I love to study travelers on the cars and on the ferry-boats. It is impossible for a close observer to mistake a railroad official for anybody else; the way the head of a conductor sets on his shoulders is different from the set of any other man's head, and every big railroad marks its man. Of the passengers, one can pick out the heavy business man, the lawyer, the literary man, the adventurer, the man who carries secrets, and the man whose heart is free and open."

"You would say, then," said my brother, "that past and present history is written in each individual face."

"Exactly so," I replied; "some faces remind me of the handsome brown stone fronts we see up town with the placard '*To Let*' fastened in the window, elegantly finished, with all the modern conveniences, gas, water in and out, closets, bath-room, spacious parlors, but all empty, unfurnished, cold, and dark. Such are beautiful women whose lives are devoted to dress and fashion, on the altar of whose hearts the fires of love for knowledge, of art, of beneficence have never been kindled, whose days are frittered away in fashionable follies, and who leave nothing behind them when their lives are gone out to show that they have lived."

"You're rather hard on the butterflies," said my brother, "they make the summer bright with their fluttering, the children love to chase them in the meadows, and our ento-

mologists go into raptures over them, and you know how lovely a case of rare butterflies is."

"Oh yes," I replied, "everything has its use; if all mankind were earnest, thrifty, and self-reliant, sweet charity would be unknown, beneficence lack scope, and the highest stimulus to exertion, the love of doing good, be in a great measure withdrawn from the world."

"It is a common saying," said my brother, "that every man is the architect of his own fortune; it is also true that every man is the architect of his own face and form. He may write, if he pleases, a noble purpose on his forehead, on his gait, on his entire bearing. Nay, if he cherishes in his heart the noble purpose, it will write itself on the entire man. They who dream that meanness, selfishness, double dealing, secret sin, can be concealed in the heart, make a woeful mistake; the first can be detected at a glance in the gait, the second in the flash of the eye and the set of the mouth, the third in the folds of the chin, and the last in the furtive, downcast eye, or the brazen stare. He who keeps chiseling away at his ideal of what man should be, who lets the fine lines grow ever finer and deeper, who chips away here and there an excrescence, and little by little brings out from the marble block his dream of perfectness, who guards it from stain and dishonor, shall see it gradually turn to the soul's essence, till all be made immortal."

WHY WEAR MASKS?—If we could only read each others' hearts we should be kinder to each other. If we knew the woes and bitterness and physical annoyances of our neighbors, we should make allowances for them which we do not now. We go about masked, uttering stereotyped sentiments, hiding our heart-pangs and our headaches as carefully as we can; and yet we wonder that others do not discover them by intuition. We cover our best feelings from the light; we do not so conceal our resentments and our dislikes, of which we are prone to be proud. Often two people sit close together with "I love you" in either heart, and neither knows it. Each thinks "I could be fond, but what is the use of wasting fondness on one who does not care for it?" and so they part and go their ways alone. Life is a masquerade at

which few unmask even to their very dearest. And though there is need of much masking, it would be well if we dared show plainly our real faces from birth to death, for then some few at least would truly love each other. It seems

that in our social life there is an effort, on the part of all, to conceal the true feelings and emotions of the heart; and thus artificial sentiment and affected conduct characterize the matured. Let all be frank and natural.



MILLARD FILLMORE.

IN personal appearance Mr. Fillmore was, when in his prime, "a good-looking man." He stood about six feet high, was well proportioned, and weighed not far from one hundred and eighty pounds; was of fair complexion, having light hair and eyes, and was very gentlemanly in his deportment. His head was large, especially in the upper portions, including Approbative-ness, Veneration, Benevolence, and Cautious-ness, but not so large in Self-Esteem, Firmness, and Combative-ness. That he had high aspirations and a love for praise, there can be no doubt. But he had not those stronger traits, depending on convictions, which move men to take positions and maintain them

without regard to personal consequences. His nature was more mellow, yielding, and compromising. Compare his life and character with that of the late Charles Sumner, and you will have a fair estimate of the man. The following sketch, condensed from the *Golden Age*, furnishes a very accurate "pen-picture" of the man and of his life:

On the night of March 8th, Millard Fillmore died at his residence in Buffalo, after a brief illness. He had reached the age of seventy-three, and to the time of his last sickness had been a man almost youthful still in bodily strength and mental vigor. This hale old age was doubtless due to his sturdy New England ancestry, and to the

hard but wholesome discipline to which he was inured in youth. For, like most of our public men, Millard Fillmore rose to high place and station from poverty and obscurity. His father and mother, soon after their marriage, left New England in the hope of bettering their lowly fortunes, and settled in what was then the little frontier settlement of Locke, N. Y. There Millard Fillmore, the second son of his parents, was born December 7, 1801. While yet in his infancy, the family plunged still further into the wilderness, and his childhood was spent at Sempronius. The little education which he received was that which a district school afforded, and as these school sessions were not longer than three months of each year, and as text-books were few and poor, it may be easily guessed that young Millard's scholarship was of the most meager sort. He never saw a grammar nor a geography till he was eighteen years of age. The family Bible was one of his chief delights, for he was a great lover of reading; and, as this was almost his only book, he devoured it with infinite relish.

At the age of fourteen he was sent out into the world—though so poorly equipped, to make his way in it—for he was now considered old enough to begin to earn his own living. He was first set at work to learn the fuller's trade, but after a few months returned to Sempronius, where he was apprenticed to a clothier. A village library had just been established here, and young Fillmore became one of its most insatiable readers. When nineteen years of age he made the acquaintance of a lawyer, Judge Wood, who took an interest in the studious boy, and offered him his board and the use of his library in exchange for his services. This offer young Fillmore eagerly accepted. He bought his time of his guardian, and went into the study of law with the same zeal which he had shown in his miscellaneous readings. To help to defray his expenses he taught school in the winter; for though he was not very well educated he could teach others more ignorant than himself, and in teaching them he educated himself.

His father, who was a restless spirit, always moving about in quest of fortune, which he never found, had now gone to Aurora, and

hither Millard followed him, performing the journey on foot. Soon after, the young man pushed on to Buffalo, where he engaged a place in a lawyer's office, and also took charge of a school. Reading law before breakfast, teaching school all day, and reading law again at night, young Fillmore soon prepared himself for admission to the Bar. And with a little library worth \$39, for which he ran in debt, the newly-fledged lawyer opened an office in Aurora, and soon by dint of energy and skill acquired a very tolerable practice in the lower courts. By the time he was twenty-five he ventured to marry Miss Abigail Powers, daughter of a clergyman, and two years later Mr. Fillmore was admitted to practice in the supreme courts.

From this time his course was steadily upward. He was elected to the Legislature of the State, which is the first step in a political career in America. Here he distinguished himself for his talents and probity, and was soon a leader in the House. "When Fillmore says a thing is right," said a Democratic member, "we all vote for it." Mr. Fillmore was one of the active movers in framing the law abolishing imprisonment for debt, and its passage was largely due to his influence. In 1832 he was elected to Congress, to which position he was re-elected for three successive terms. As chairman of the Committee of Ways and Means, and in framing the Tariff of that epoch, he distinguished himself as a hard and faithful worker, though he made no particular impression as a brilliant debater.

In 1848 he was run on the same ticket with Gen. Taylor, for Vice-President, and was carried into office by the tidal wave which bore the popular soldier into the Presidential chair. And on the sudden death of the Chief Magistrate, Mr. Fillmore became the President of the United States. Nothing in his past career, and nothing in his own character would have entitled him to this post. The American people had never regarded the position of Vice-President as of much importance, and in giving it to Millard Fillmore, little dreamed that they were choosing a Chief Magistrate by the act.

Mr. Fillmore, on this unexpected elevation to power, at once inaugurated a new policy

from that which Gen. Taylor had indicated during his brief tenure of office. He chose a new cabinet, of which Daniel Webster was a member—and an influential one. It was during this administration that the Fugitive Slave Bill was passed and signed by President Fillmore, who lent a most vigorous and determined support to its enforcement, and by this act lost all popularity at the North, and won none in exchange from the South, for whose support and favor it was a bid. It was this act of President Fillmore's that remanded him to private life ever after, and will give him a place in the history of the rule of the slave power in the United States.

The last years of Mr. Fillmore were spent in the quiet obscurity of private life. Once or twice his friends attempted to bring him into prominence again, and he was nominated

for office only to be ignominiously defeated. The last attempt of that sort was his candidacy for President by the Native American or Know Nothing party. After an overwhelming defeat on this occasion, neither he nor his friends sought office again for him.

Mr. Fillmore was twice married, his second wife surviving him. Our portrait represents him as he appeared when President.

No fair judgment of Millard Fillmore's character can be made without separating his public from his private career. In private he was all that was estimable, gentlemanly, cultured, and genial; he was as universally beloved as respected; but he was in no sense a great man, and as a statesman he neither won nor deserved the admiration of the few, nor had he the qualities which can inspire enthusiasm in the masses, or make a man a great popular leader.

HORSE PHYSIOGNOMY;

OR, SIGNS OF CHARACTER IN THE ANIMAL COUNTENANCE.

THE *Prairie Farmer* thus tries its hand on animal expression: Each brute animal has some principal quality by which it is distinguished from all others. As the make of each is distinct from all others, so, likewise, is the character. The principal character is denoted by a peculiar and visible form. Each beast has, certainly, a peculiar character, as it has a peculiar form. May we not, hence,



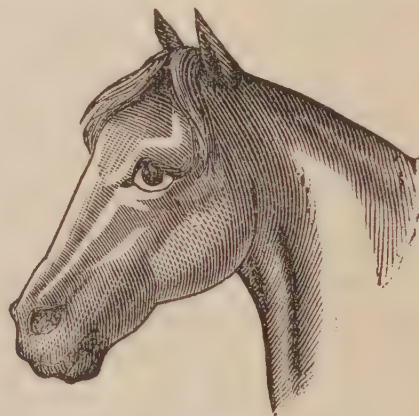
VICIOUS.

by analogy, infer that predominant qualities of the mind are as certainly expressed by predominant forms of the body, as that the peculiar qualities of a species are expressed in the general form of that species?

The principal character of the species in animals remains such as it was given by nature; it neither can be obscured by accessory

qualities, nor concealed by art. The essential of the character can as little be changed as the peculiarity of the form. May we not, therefore, with the highest certainty, affirm such a form is only expressive of such a character?

The man who is so much taken up by admiring contemplation of his own face as to afford him no time to contemplate anything



KIND.

else, may be perfectly indifferent as to the physiognomy of a horse; but if inattention to this feature in the animal embraced the possession of a refractory or a dangerous one, he might find physiognomy in the horse worthy of notice.

Without previous knowledge of the animal, we candidly confess we should greatly

hesitate in buying a horse with a bad, treacherous-looking countenance. Many worthy men and many well disposed horses are, we grant, unfortunate in this particular. We should not value a friend the less for it, but it would certainly not induce us to form an acquaintance with the man possessing it, without cogent reasons for so doing. Then why should we with a horse?

A good countenance in mankind is, no doubt, often deceptive; a forbidding one is certainly more honest, for on it we see in characters legible—beware! Few men, not from choice, but circumstances, have had a more extended acquaintance with man than ourself, and, perhaps, not one man in a thousand from the same cause has made acquaintance with more horses. We have found rogues with prepossessing countenances in both; but we never, to our recollection, had to do with man or beast of forbidding countenance that proved apostate to the sign nature had put up indicative of what was passing within. Ugly as sin either may be—this has nothing to do with a forbidding, repulsive, disagreeable, offensive, odious, or disgusting aspect. We do not hold a pug dog very handsome as to face, and we knew a girl as like one, excepting in color, as she well could be, but she was the merriest little lass in existence; everybody loved her; she found a very sensible and handsome fellow that not only loved, but succeeded in making her his better half, owing to a lamentable, foolish bashfulness of ours, or, rather, a want of courage or daring.

There are many real or fancied imperfections of horses that might induce our readers, as thousands of others daily do, to reject horses from first appearances, without properly investigating the amount of objection any imperfection may produce, or without consulting others on the subject. Our advice is to give the imperfect horse that chance that is accorded to the criminal, namely, the advantage of being brought before a judge and the fair chance of trial. We can find plenty of books that tell what a perfect horse is, but they do not quite tell us where to find him; as the rogue said, you may “look to me” for payment; but we are not aware that looking to a man and being paid are quite the same thing.

[The horse, the ox, the dog, pig, rat, mouse, reptile, insect, have each a physiognomy peculiar to themselves. No two horses, oxen, dogs, or pigs are *exactly* alike. Each may be distinguished from the other both by external signs and by mental characteristics or dispositions. One horse is *broad* between the eyes and ears, and is fearless, brave, courageous, kind, and intelligent. Another is *narrow* between the eyes and ears, and is timid, scarey, treacherous, vicious, and *not* marked for intelligence. One who knows how, can read the one or the other at a glance. Indeed, professional horsemen are noted for the accuracy of their judgments on horses.

The study of animal physiognomy is exceedingly interesting and useful. We should like to look into the face of that cow that was recently sold near Utica, N. Y., for forty thousand dollars, then to compare it with one of the common herd.]

PAREPA ROSA.

BEAUTIFUL echoes are ringing to-day,
Memory's magic for cheering our way,
Lighting our Now by the torch of the Past,
Sweetest of echoes, too fragile to last;
Breathings of melodies often we've heard,
Ringing out cheerily, free as a bird,
Gliding to cadences tender and low,
Like unto breathings of hearts full of woe.

Bitter, sweet echoes! for never again
Shall our lost song-bird take up the refrain.
Shadows of melodies, wandering lone,
Seeking the singer who wakened the tone;
Whispering voices, your key-note a tear;
Vainly you deem she is wandering near.
Contract with silence Parepa shall keep,
Breaking it not though a nation shall weep.
ROCHESTER, N. Y. M. H. E.

NATURAL LANGUAGE.—Common emotions, no less than tragic passions, have their proofs, although it is not every man to whom these proofs are legible. But it no more follows that these proofs do not exist, because all men are not able to recognize them, than it does that there are not different species in botany or zoology, because all men are not able to distinguish one species from another. The common observer knows only a few different kinds of fishes. But had any

dried bone belonging to any variety in the whole class of mammalia been shown to Cuvier, from the inspection of that bone he

could construct the whole animal to which it belonged, and tell whether it lived upon flesh or grass.—*Mann.*

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall !
Thou art the nurse of virtue.

THE LESSONS LEARNED IN PLAY-HOURS.

ANYBODY at all conversant with the genus *boy*, is cognizant of the fact that their many and varied games are each and all played at certain specified seasons of the year; also, that the whole genus are playing the same game at any given annual period. Indeed, your boy would no more think of playing marbles in August than he would of bringing out his sled for coasting, or a lady would of appearing on the street clad in velvets and sables during the same month. Another thing the attentive observer will not be long in discovering, viz., that though boys are mostly noisy, they are not generally quarrelsome over their sport. I say not generally, for there is one season of the year, one annual game over which you shall hear, any day while it lasts, loud, angry voices, and wrangling epithets. I allude to the aforementioned game of marbles. A moment's reflection explains this exception to the general rule. The game of marbles is a gambling one, and it not only requires some skill in execution, but it admits of trickery besides; hence it comes that angry passions rise. Sitting here, on this bright spring day, with open windows, my ears are offended by tones and terms of indignation and bitterness, the bickerings of incipient gamblers. These altercations bring to my mind with pressing force a thought that has often presented itself; the thought that the amusements of children are among the most potent agencies of education; that, if it be possible to teach youth to enjoy aright—to enjoy in consonance with the higher, not the lower, nature—such teachings would be of more benefit to the race than all the lore of all the ages without it. This thought is, at least,

worthy of consideration. We have come to understand that pleasure and sin are not necessarily synonymous terms, as was taught by the creed of our Puritan ancestors and the dogmas of ascetic, recluse-commending Romanists; but we have not yet learned to half appreciate the power for good that lies in rightful enjoyments, nor the power for evil couched in those that debase. It may be safely asserted, as a broad, universal principle, that human beings crave pleasure; to seek it is an instinct of all animal life, and when instincts are strong, they are apt to be obeyed. True, among the human family we find, if not a higher, at least a collateral power, that of reason; but this latter is not designed to extinguish or to extirpate the former, only to guide and lead, or, if need be, to control it. Granted, then, that this instinct of pleasure-seeking can not be suppressed, but in some guise will claim its due, we see how desirable it is that reason, truth, and love—not mere self-love—shall have direction of our earliest tastes and habits, that our pleasures may be of a noble character; and that through them we may be elevated, not abased. We all know the old adage, "Show me what company you keep, and I will tell you what you are," but this might be even better expressed thus: "Show me in what you find your pleasures, and I will tell you what you are." There was a time when religious people claimed that the change known as conversion was quite sufficient to correct, rather to make over all the perverted and disordered habits of the most depraved and besotted specimens of humanity; but we have learned to prefer the Christian character that is made out of more

symmetrical materials, and we pretty generally concede that Solomon was not much astray in his dictum; "Train up a child in the way he should go," etc. Again, we have spent too much effort in trying to depress evil or animal propensities; we should do better to expend the same effort in cultivating the higher part—we seem to have forgotten that nature abhors a vacuum, not less in the mental than in the physical kingdom. There is no mode of exterminating vicious pleasures half so effective as that of teaching humanity to enjoy a nobler grade; and this kind of training can not be begun too early. If you wish to see your infant grow up selfish and resentful, beat its

brothers and sisters, or even the chairs and tables in mimic wrath for its diversion; if you wish to train your child to be a rogue, cheat in fun when you are playing games in the evening circle; and if you choose to have your boy form a taste for gambling, let him play marbles or any other game in which he shall acquire anything, no matter of how little value, for which he has not given a just equivalent. It may be laid down as a rule, which parents and teachers can not too carefully observe, that children should be daily, hourly, *always* taught the divine, eternal majesty and beauty of justice and equity, of perfect fair-dealing, as well as of self-control in all their childish games and pastimes.

MRS. OLIVE STEWART.

LIFE'S SWEETEST MEMORY.

BY BELLA FRENCH.

OH, darling, as I toss adown
Life's dark and turbid river,
Of all the blessed memories
For which I thank the Giver—
Of all our good and perfect gifts
That which to me is dearest,
Is of the day when our life-barks
Together drifted nearest.

A shadow lay upon the hills,
For day was nearly ended,
And heavy clouds shut out the sky
So no star-beams descended.
Yet all my soul was filled with light;
My heart had wings of gladness;
My poet-harp trilled to your touch
Without a strain of sadness.

Then hand met hand in warm embrace,
And lips, with lovers' token,
And spirit greeted spirit there,
Though scarce a word was spoken.

It was a time of perfect bliss—
A blessed soul reunion,
And had to us the sacredness
Of Heaven's sweet communion.

My life-bark drifts alone to-day—
Above the sky is clearer,
And yet I have a memory
That Heaven once was nearer.
The clover blossoms lift their heads
To catch the sun's sweet kisses;
But oh, my soul sighs for the light
And sweetness that it misses.

It lived to know that such a light
And sweetness had existence,
Then see them pass from it away
And vanish in the distance.
Its sighs are wafted on the winds
That drift across the clover—
Oh, I would give this world of mine
To live that moment over!

ARE TROUBLES BLESSINGS IN DISGUISE?

WE people of the South are in trouble. We see no bright spot in the clouds that hang over our heads; no stars shine through the midnight darkness of our sky. Behind us are the old debts; before us, prospective starvation. Our lands lie uncultivated for want of laborers; our shops are shut for lack of customers; our children must grow up in ignorance, because we have no means to educate them; and we can not even

enjoy sleep at night, being haunted by visions of the midnight robber and incendiary. Verily, troubles thicken around us; like lost travelers, we wander in a strange forest, and know not where to direct our steps.

Shall we try to farm with freedmen? Experience has proved their fickleness of purpose and remissness in labor when left to work alone. Shall we attempt to merchandise? The supply of goods in the country

exceeds the demand. Then it won't do to pause and perish while trying to master a profession, or acquire a trade! To those who treat with contempt or incredulity the doctrine of a general and special Providence, the aspect of the times is really appalling—to them we seem to be driving on a lee-shore, with no beacon-light to warn us off the rocks. But, thank heaven, there are some who have not made shipwreck of faith with loss of property; and to such, whatever happens, taken in all its bearings, is right, and must work for the eventual good of our race, and the glory of Him who made us. Are troubles blessings in disguise? We may make them such. We have known a person, on recovering from a violent spell of illness, enjoy better health than ever before. We have heard of a wicked man, who, on losing his only child, a lovely daughter, became one of the most faithful Christians, making it his study how to do most good. A man's old house is burned down—he goes to work and builds a better, whereas, but for the fire, the old, ugly, dilapidated one would have sheltered him till he died. Another gets in the way of drinking, and some night, on a spree, is thrown from his horse and nearly killed, but he finally recovers, and is henceforth a sober, steady man. Who will not own that in all these cases the troubles were blessings in disguise?

We people of the South found ourselves, at the close of the war, in a pitiable plight. We were a very dependent people—*independent* enough in our principles, thoughts, and aspirations, but sadly dependent on our slaves for such common necessities as bread and meat; very fond of luxury and ease, and being waited on. We were also great victims of dyspepsia, a national ailment, that stole our ladies' roses, gave them an expression of lassitude, and made our gentlemen sleepy-headed in the daytime and wakeful at night, "Master" came home from town very tired from his little ride, threw the reins to John, almost envying the negro his healthful elasticity, as grinning he mounted and galloped off to the lots; and "mistress" was worried to death with her afternoon spent in making "calls," and, while Bettie undressed her, wondered how that girl could always be so well, and nothing ever disagreed with her?

Master and mistress never thought how they were giving John and Bettie all their vigor, by letting them do all their exercise.

I will not pause here to consider whether such a state of things was calculated to develop the noblest type of nationality (that point has been thoroughly discussed)—certain it is that it had some tendency to foster selfishness and effeminacy.

With the end of the war, the abolition of slavery, and our sudden descent from affluence to poverty, we were somewhat puzzled to adapt ourselves to the new *régime*. We tried to farm a year or two with freedmen, continuing our masterful ways, and found ourselves annually poorer. We waked up, a cold new year's morning, and not a freedman could be started to feed the stock; so there being nobody else to do it, though our hands were tender, and shelling corn hurt them dreadfully, to work we went, and were surprised to find ourselves warmed up by it, and came to breakfast with an appetite keen as a north-east wind. The good wife, meantime, minus a cook, has had to leave her luxurious couch, where she was wont to woo Morpheus till ten o'clock in the day, and set about getting breakfast. What a task for unaccustomed hands! Think of cleaning pots, and kneading dough, and trying to cook in an open fire-place, in a freezing cold kitchen; a kitchen, too, distressfully dirty from the leavings of the colored Dinah that presided heretofore. How different from the light, neat room at the end of the house containing the quick warming-stove of Northern housekeepers! But at last the weighty business is achieved, and breakfast smokes on the table, greatly relished by the family, though the bread may be slightly burned, and the meat fried too brown; but the poor *mater-familias* that cooked it has a painfully red face from cooking over the fire, a scalded hand, and cut finger. But she is hungry, too, and will soon learn to cook, and get things about her in working kelter.

The truth is, we Southern people have got to *master* the situation by actual *personal exertion*. It won't do to shirk the matter, and keep on hiring large bodies of freedmen to *halve* the crop, hoping that fruitful seasons will make our half a fortune. We may just make our calculations for excessive spring

rains and summer droughts, the effects of which we may counteract by careful cultivation. Let us work ourselves, nor mind hardening our hands with ennobling toil. We will find our example more potent with our employes than even the prospect of half the crop! As for Southern women, they are equally called upon to stoop to drudgery (as we used to think it), in order to show themselves equal to the situation. But with system and diligence, they can work their do-

mestic machinery with greater tidiness and elegance, and, in many cases, with decided improvement to their health, than when they had half-a-dozen servants to do the work of one. We will learn, in time, that manual labor is not incompatible with the highest intellectuality; so far from it, the human being can only reach that degree of excellence of which Nature has rendered him susceptible, by the due exercise of all his faculties, physical, mental, and moral.

VIRGINIA DU RANT COVINGTON.

CHARITY, TRUE AND FALSE.

The truly generous is the truly wise;
And he who loves not others, lives unblest.—*Home*.

DURING the past winter we have been called to consider the subject of charity from many points of view, so severely have want and destitution been felt in the homes of our people. The financial crisis of last fall at once threw out of employment thousands of the industrious and thrifty, and thousands of those who are said "to live from hand to mouth." The latter, especially the many with families looking to them for

and clothing and provisions were made, and new methods for dispensing the bounty of the kind and sympathizing were organized. Cowper's prediction,

"Did charity prevail the press would prove
A vehicle of virtue, truth, and love,"—

seems well confirmed since leading newspapers have made common cause for the relief of the needy. Soup houses have been established for the free distribution of good food to the hungry, and much private effort has been in operation to visit the homes of the destitute and afford the relief required in every worthy case. Probably the most conspicuous feature of our New York life to-day is its charitable enterprise. In nearly every section of the city are headquarters for the supply of the necessities of life to those that want them. The merchant and banker and the property owner, though feeling each in his respective sphere the pinch of the panic, nevertheless find themselves moved to draw upon their "reserve" in obedience to the tearful appeal of charity. The lady of fashion defers the purchase of the new robe and sends the money to the "Guild" her minister has just organized; while the servant in the kitchen, with larger heart and brimming eyes, makes sacrifice of her scant earnings, that little ones may not weep in vain for warmth and bread.

Americans were wont to be termed close, stingy, and hard in their regard for money, and many features in our business customs might well impress the foreigner with something of such a notion; but the great panic



MISPLACED REGARD.—From *The Wayside*.

daily bread, became dependent upon the charities of the public, thus adding greatly to the burden of communities where the alms-house had already been a heavy charge. In the large cities, New York, Philadelphia, Newark, particularly, whose industrial classes form the bulk of the population, the distress was at once apparent, and in response to the call of mercy, large contributions of money

of 1873, whose consequences the people yet suffer, broke through the superficial crust and brought to view the inner, deeper sentiment, the true soul-life of those who give character and tone to American society. All that was needed was one strong "touch of nature" to show the American in his real manhood. Charity came and touched him, and his heart melted.

But even now there are some misguided ones whose love is so much given to certain objects that they have no room in their hearts for the needy among their fellow-mortals. Many cling to their narcotic idol, tobacco, despite the cost and the injury. Many will not let go the stimulating cup, despite the ruin and misery that everywhere mark its effects. And these, in their foolish pride, ridicule the maiden or childless wife whose motherly instinct has taken to her

heart some dumb beast, a curly poodle, perchance, and on it lavishes tender care and caresses. She has chosen a better part than they, for she may find much of comfort in the dumb pet, while they, poor votaries of corrupting habit, find in its persistence only disease and death for themselves, and sorrow and shame for their friends.

However, when the woman permits her fondness for a brute to come between her heart and duty, then she sins. When, as in the illustration, she turns the unfortunate from her door without a crumb of kindness; when kindness to the little snarling cur is exercised in contrast with harshness and denial to the little, hungry, and tired child of poverty, then her incongruous affection is made apparent. She has distorted the fairest element in her woman's nature; she has diverted from its high and holy course that sentiment which is the "bond of all virtues."

THE TRUE ALTAR.

BY MRS. M. F. BUTTS.

(Suggested by an incident in "Les Miserables.")

THE people came to the priest;
 "Good father," said they,
 "We love the holy altar
 Where we kneel to pray.
 We would broider a cloth
 Of fine silk and wool
 To cover the altar,
 For our hearts are full."
 "Nay, nay," said the priest;
 "When the heart is full
 Spend not its treasures
 In fine silk and wool.
 Listen, my brothers:
 Do you hear a moan?
 'Tis the poor man waiting,
 Sick and alone.

"His darlings ask in vain
 For a piece of bread;
 And what saith the Lord?"
 The good priest said.
 "The tender-hearted Christ
 Will be very wroth
 If you leave his poor
 For an altar-cloth.
 "He blesses the sacred altar,
 Where we kneel to pray,
 But in the silence
 I hear Him say:
 'Seek me, my children,
 In works of grace—
 Where you comfort a heart
 Is the holy place.'"

PRETTY, DON'T HURT.

BY ANNA CLEAVES.

"THE front hair is worn in crimps." So I says *a-la-mode*, and of course my hair must be crimped; so I twist it in and out, and around the hair-pins, until the roots are nearly twisted out of my head. I know it cuts and ruins the hair, but one might as well have no hair at all as to wear it out of style. There is no telling the number of

false braids and topsys, and chignons, and curls, and combs, and hair-pins, that is piled on the top of one's head now-a-days. I am sure my scalp must be as thick and strong as the lid to a cast-iron stove, or it would have been crushed in long ago.

But "pretty, don't hurt;" I ought to stand it if other people can!

And here are my shoes—they are half a size at least too small for me. I ordered them to be made so. Who wants to go clumping around in shoes large enough for a giantess! A pretty tight fit, it is true; doubtless they will give me a corn fit, too. But these French heels are lovely! nearly two inches in height, and not larger around than a quarter of a dollar. I expect they will trip me up some day and nearly break my neck. But, goodness me! one must run the risk of having one's neck broken for the sake of being fashionable.

And now for the new gloves. Like my shoes, I confess they are very small; but they must go on if every finger is put out of joint in the attempt. If there is anything that I do despise, it is a loose, wrinkly-fitting glove. Then push and pull, and tug and stretch. There is nothing like patience and perseverance in an undertaking of this kind.

There! one glove is on, at least, and now for another tug in order to get it buttoned. It is accomplished at last, and my wrist aches with the pressure; but it will soon be numb, and I shan't feel it. I declare I hardly know my own hand, it looks so small and genteel! No, no; "pretty, don't hurt."

But here come the dressmaker to fit my new dresses. Ah! there is nothing so charming as handsome bonnets and dresses. Talk about the beauties of nature, the bewitching strains of music, or soul-inspiring eloquence; why, they are not to be compared with the pleasure one receives in gazing at a new dress or a tiny shell of a bonnet, although the latter may engender catarrh or invite sun-stroke.

Then it is so pleasant to stand hour after hour to be fitted. First resting on one foot, then on the other; now leaning one arm on the top of a bureau, or holding one's self up with both hands grasping the back of a chair. But "pretty, don't hurt." The gossamer muslins and glossy silks and satins lying about at one's feet are an antidote against every attending ache and pain. As to trained dresses, they are more than superb, and too beautiful to be confined within doors. Besides, it is such a healthy and delightful exercise to be dragging on one's hips a piece more or less of rich, rustling silk. Then what a graceful employment it is

to keep it out of the mud. First hitching it up on one side, then on the other, and so keep on hitching until the walk is ended, and one is completely exhausted.

It takes two full hours for a lady to harness up for a walk, one more hour to unharness, and the remainder of the day to recover from the fatigue of the whole undertaking.

But who minds such trifles when a handsome dress is to be shown off?

Next in order comes the jewelry. Who is there that despises gold and diamonds? No matter if a ring is so small around that it cuts one's finger nearly in two, it will not be felt, so long as the ring is of precious stones.

Then what a pleasant sensation it is to have one's ears dragged and stretched out of shape by expensive and weighty ear-drops, to say nothing of a diamond necklace that nearly chokes one. But it won't choke, never fear; "pretty, don't hurt."

Now, is it not astonishing to see how much we poor mortals will endure of fatigue, pain, and even deformity, for the sake of gratifying a deluded fancy? Even health and comfort are sacrificed to Fashion's most frivolous demands. Mothers are bond women to their caprices, and children born slaves, subject to their arbitrary rule.

And so we live and suffer and die in the belief that we must follow in the footsteps of this tyrant, Fashion, at any cost, and that "pretty, don't hurt."

A LONG BEARD.—"There is a gentleman in this town of the name of Jones," the Eureka (Nev.) *Sentinel* says, "whose beard is three feet three inches long. It is of splendid growth, almost as soft and as fine as a lady's hair, and is really a curiosity in its way. Mr. Jones stands six feet and one inch high, and his beard, when allowed its liberty, strikes him about the knees. He seldom, however, makes a display of it. He usually keeps it braided, and confined within his shirt-bosom, so that persons seeing him on the street would not dream that his beard was of more than ordinary length."

[Well, what's the use of it? If we did not cut our toe-nails or our finger-nails, they would in time become some inches in length—as in China—and be quite in our way. So of the hair. We believe in cutting the hair and in trimming the nails, but *not* in shaving, nor in pulling out the beard, as certain tribes of Indians do. Common sense is a good thing.

Department of Ethnology.

True Christianity will gain by every step which is made in the knowledge of man.—*Spurzheim.*

THE LATIN AND TEUTONIC RACES.

THE HISTORICAL SIGNIFICANCE OF THE LATE EUROPEAN WAR.

BY E. G. HOLLAND.

IN Europe there are three distinct races. The Slavonic is represented by Russia and Poland; the Latin by Italy, France, and Spain; the Teutonic by Germany, Holland, Norway, Sweden, Denmark, Great Britain, the United States, Australia, and the chief population of all the Canadas. Switzerland belongs more to the Teutonic than to any other race. Says Dr. Arnold, in his "Lectures on Modern History": "I say nothing of the prospects and influence of the German race in Africa and India; it is enough to say that half of Europe and all America and Australia are German, more or less completely, in race, in language, or in institutions, or in all."

The Slavonic or Slavonic race, so powerful in numbers, so large in territory and natural resources, arrived at civilization late, but under the sure and steady march of improvement, it stands ready to act an important part on the arena of history, and may take its turn, in the ages of the future, in leading the world. The fate which disposes of nations and races does not leave the scepter of command forever in the *same hands*. No people can forever lead and rule. The race that has lain in barbarism for one or two thousand years after another has blossomed in culture, comes forward at the right time to take its place at the head when the other has done its work and exhausted its resources. Nations and races have, like individuals, their particular callings, and no one of them can stay long in power; that is, in full organized force, after its mission of working utility is ended. In this respect the genius of events, or the logic of history, is full of beneficent insight. For emergencies of a cosmic nature the God of nations and races is always rich in resources; is ever educating them for the inevitable crises.

DOMINANT NATIONS IN EUROPE.

In the history of Europe there are three nations who have played leading parts in its education, the Jew, the Roman, and the Greek. Each had a different calling. The calling of each grew naturally out of its inherent genius, aided by the geographical circumstances in which it was placed. The Greeks were the most purely intellectual, and excelled all others in their artistic genius. For philosophical reason, in the perception of the beauty of *form*, in the expression of ideas in language, in statuary, and architecture, the world was unable to produce its equal. No other people did or could produce the equal of Plato in thought, of Homer in song, of Eschylus in tragedy, or of Phidias and Praxiteles in statuary. Egypt was colossal in the arts, and had the prototypes of the Greek mythology and of its artistic representation. Jupiter Ammon stood in central grandeur in the culture of Egypt long before his image graced the Parthenon. But so beautifully original was the genius of Hellas, that everything it touched became new. Gladsome and joyous was the spirit of Hellas. Alexander became the educational benefactor of millions by planting the Greek civilization over the wide area of his conquests, the traces of which were visible for more than a thousand years, and remained in full vigor down to the time of the Mohammedan conquests.

ALEXANDER AND GREEK INFLUENCE.

"In every region of the world that Alexander traveled," said a modern historian, "he planted Greek settlements and founded cities, in the population of which the Greek element at once asserted its *predominance*. Among his successors, the Seleucidæ and the Ptolomies imitated their great captain in blending schemes of civilization, of commercial intercourse, and of literary and

scientific research with all their enterprises of military aggrandizement, and with all their systems of civil administration. Such was the ascendancy of the Greek genius, so wonderfully comprehensive and assimilating was the cultivation it introduced, that, within thirty years after Alexander crossed the Hellespont, the Greek language was spoken in every country from the shores of the Aegean to the Indus, and also throughout Egypt, not, indeed, wholly to the extirpation of the native dialects, but it became the language of every court, of all literature, of every judicial and political function, and formed a medium of communication among the many myriads of mankind inhabiting these large portions of the Old World."

Speaking of this impartation of the Greek character throughout Asia Minor, Syria, and Egypt, he adds:

"The infinite value of this to humanity in the highest and holiest point of view has often been pointed out, and the workings of the finger of Providence have been gratefully recognized by those who have observed how the early growth and progress of Christianity were aided by that diffusion of the Greek language and civilization throughout Asia Minor, Syria, and Egypt, which had been caused by the Macedonian conquest of the East."

Not only did the records of Christianity have to be written in the language of the Greeks, but the Greek intellect, whose chief seat of learning was at Alexandria, so impressed itself on its *form*, that it adapted it to the acceptance of the Pagan millions in the fourth century.

The learning and culture of the middle ages, which Europe derived so largely from Arabian authors, were found on examination to be derived from Greek sources. In all civilized nations the culture of scholars derives directly from Hellas, as in elegant architecture and in sculpture the debt of Hellenic genius has to be acknowledged. The intellectual influence of Greece was by Alexander's victories poured on the Eastern world; it was from thence brought to bear on mediæval Europe by the spread of the Saracenic powers a thousand years later. Its action on modern civilization through this channel alone was great, and the remnants

of the classic civilization which survived in Italy, Gaul, Britain, and Spain, after the irruption of the Germanic nations, were not without their influence in making the better culture of the west. Indeed, the debt which civilization owes to the Greeks is so great in amount, and so plain in its proofs, that no monuments are needed to perpetuate the memory of it. The world's history is its eternal monument.

HONOR TO WHOM HONOR.

The Hebrew race of Asiatic origin must be remembered so long as Religion has a history; the Greeks, so long as Art and Philosophy shall be seen in their connection with the past. But it is the Latin and Teutonic races I would now examine; nor would I condemn one race for not having the same kind of merits as the other. It would be just as wise to declare the pear tree deficient because it does not bear plums, or the apple tree as wanting because it does not bear peaches. Let each tree be judged by its fruit, and let us be satisfied when it produces good fruit of the kind which answers to its natural calling. The Roman tree bears differently from the Greek tree; the Israelitish tree very differently from either; and the Latin tree has ever borne different fruit from the Teutonic. Yet in the forest of nations these were all noble trees, the genuine planting of divine Providence, not one of them by any possibility being able to fulfill the purposes of the other.

THE PRESENT DEBTOR TO THE PAST.

The highest wisdom is magnanimous in the appreciation of all races. Present civilization, under no just analysis, can fail to acknowledge its debt to India, to Persia, and Egypt. The Greeks, Romans, and Jews could not have been what they were but for the *antecedents* found in these older countries. Even the aborigines of all countries, the rude savages whose pointed arrow-heads and flint axes speak of the more ignorant periods of man's existence on the planet, were indispensable workers for civilization, like the Baptist of old, crying in the wilderness, and waiting by order of Law till greater light shall arrive, the light of the civilized man, in whose rays the man of the wilderness must always decrease and pass away. The savages of the primitive forest learned their share of

wisdom; knew valuable secrets of the healing art; held a certain dominion over nature which the combined cunning of the animal kingdom could not approach; and often left traces of heroic fortitude and temperance of life which shames the luxuriant sons and daughters of better educated peoples. Let civilization magnanimously acknowledge every contribution. Humanity is the unit of many parts, and the law of progress has graded its pathway from the lowest to the highest conditions, by steps as regularly successive as those which lead from the base to the apex of Egypt's pyramids.

Under this liberal interpretation of the mission of distinct races and peoples, I would ask the reader to follow me in a candid inquiry into the

HISTORICAL MISSION OF THE LATIN OR ROMAN RACE.

Fortunately for the inquiry, no race of its antiquity ever left plainer records of its past, or had so conspicuous a place in the historical works of contemporaneous peoples. If, as some writers aver, the date of authentic history can be safely placed at about eight hundred years before the Christian era, the earliest appearance of this people on the arena of history lies within the limit; nor do the few mythological clouds that rest over its genesis prevent the essential truths of its career from being known. It is certain that before Christianity was born the manliness of this race had so impressed itself on the world that it was deemed a proud prerogative for a man to say, "I am a Roman citizen." Foreign rulers were awed by its utterance before the chief apostle of Christianity interposed it as a shield against the fierce fanaticism of his countrymen. A deep root of manliness communicated life and power to the ancient Roman, and every conquest was based on this superior merit. It was when they deserved the mastery of the world that they won it, and it was when they had forfeited this high claim that they lost it. This is the lesson and upshot of history on this case of leadership. History in this regard is the record of justice in awarding medals to nations and races.

Younger than the Greeks, composed of coarser but stronger stuff than they, dating the foundation of their "Eternal City" seven

hundred and fifty-six years before the Christian era, this race, whose ancient seat was Rome, not Paris or Madrid, has had full two thousand five hundred years in which to fill up its lines of Destiny; and this much must be acceded to the genius that has led it on thus far, that no European race of men since time began ever held on to the scepter of power so long, and, all in all, so ably as it has done. Now that the scepter is about to fall from its hands in Europe, now that its career of leadership is about to close in favor of a High call of Providence to the Teutonic race to take the world's leadership for the next one thousand years at least, let us make conspicuous the merits of this Latin section of mankind which has done so much for itself and so much for humanity. The end is not yet; but to my mind, for the last twenty years, it has been apparent that God's best reserves were the Teutons, and that, in due time, the full mastery of Europe and of the civilized world would be in their hands. For it has more daylight in its face, more azure sky in its eyes, more depth in its Reason, more rectitude in its conscience, and far more inherent love of individual liberty in its aspirations. In God's plan the better does not give place to the worse, but the reverse.

ROMAN GOVERNMENT.

The civilizations which clustered about the Mediterranean were destined to be for the world at large the fountains of culture in the three departments of human interest, Religion, Art, and Government. To these the three peoples heretofore named, Jews, Greeks, and Romans, were inherently and divinely called. The Romans, above all others, had the genius of *command*, which necessarily implies the clear perception and the proper expression in form, of Law. No nation of antiquity ever had such comprehensive power of adaptation to conquered peoples, leaving free play to local religions, customs, and prejudices, so long as the bond which bound them to Rome was consistently regarded. Geographically and historically, there can never be another sea like the Mediterranean, on whose borders the three great divisions of the globe met and found a boundary, and on whose shores Asiatic ideas passed through original alembics and became modified by the more definite and practical genius of the

West. The Mediterranean was, in its union of sea and land, the mother of civilizations, the arena for developments which looked forward, in reproductive results of the future, to indefinite ages. The Romans, far below the Greeks in intellectual culture, and far beneath the Hebrews in religious intuition and depth of feeling, were able to govern them all, and in turn had them all at their feet. The Hellas that put to flight the hordes of Darius and Xerxes, that produced Homer, Miltiades, Socrates, Plato, Pericles; the race that gave the world Alexander the Great; that unfolded the most beautiful mythology the world ever knew; that had no competitor in poesy and scientific thought; could not resist the genius of command which was the soul of the Latin race. The State from whose genius Moses, David, Solomon, Isaiah, John, and Jesus were born, had received its yoke more than sixty years before the era of Christ had opened. The same of territories far remote from the Mediterranean, save the barbaric Teutons, whom several hundred years of invasion, renewed at various intervals, failed to humble or to subject. This stubborn fact, which projects like a cliff of rock in Roman history, has a deep meaning. The other fact is known to all, namely, that when the Teutons took hold of Rome in the way of invasion, they extinguished the Empire so effectually that Imperial Rome never after had any chief political part to play. Toward the close of the fifth century this was read and known of all men. The battle of Chalons, in France, in A.D. 451, the last and expiring effort of the arms of Imperial Rome, under the Roman General Ætius, saved the Empire from being trodden to pieces under the hoofs and hobnails of Atilla and his ruthless Huns; but the German (Gothic) allies of Ætius, commanded by Theodoric, were essential to the victory there won, and reserved the rich patrimony of Rome to be divided among the Teutons, who took Christianity from her, and became its most learned expounders and defenders. The Latin race could never manage and control the Teutonic. Said Tacitus, "May dissension ever prevail among the Germans, and thus prevent the *danger* with which they threaten Rome." The Cæsars had to acknowledge this unconquered rival.

Bonaparte the First held but a brief sway over it, and from it received his Waterloo downfall in 1815. The old fight has recently stood in a new phase, the ablest branch of the Latin race pitted against the Germanic, but with a greater supremacy of the latter than was ever won hitherto by immediate force of arms. The Teutons have been deemed heavy and slow; but with what lightning-like rapidity have they outwitted and outdone the French, the nation of the quickest wits, and proverbial for rapidity of performance! By this time, too, it is probably confessed far and wide that Germany contains something more than reverie and moonbeam; that its famous idealism, or transcendentalism, a Teutonic product without doubt, makes no contradiction of the practical energy and courage which conducts victorious battles and achieves colossal results.

THE ROMAN AS A CIVILIZER.

The Latin race, in all ages distinguished for patriotism—in its better days for the genius of organization, of military tactics, of liberal statesmanship, of loyal adhesion in immense masses to great commanding centers, whether in the department of State or Church—has always had popular ideas. In facts, not in speculation, the Roman power found its chosen field. The old Romans took hold of things with their naked hands, and enshrined glory in *deeds*. The services of this race to humanity up to this date may, I think, be briefly stated as in the following summary:

1. Among the earlier achievements of this race, it broke up the barriers of narrow nationalities among the various States and tribes that dwelt around the coasts of the Mediterranean. Into one Empire, ably organized, Rome fused these and many other peoples whom she held together by a community of laws, of government, and institutions. These peoples were comparatively enlightened and liberalized by this new relation.

2. Rome, conquering Greece at the one point of her superiority, that of military organization and masterly power of command, and being conquered in turn by the superior culture of Greece (each race, in turn, conquers at the point of its palpable supe-

riority), had received into her admiration and possession the civilization of Greece. This she transmitted. This one event is a jewel of rare luster in the crown of her ancient glory. What better service could she have rendered to mankind? The chief compensation of Alexander's bloody marches over the world was the diffusion of the Greek civilization; it was reserved for Rome to do the same thing through her ample dominion.

3. The Latin race (and none other could have done it), distributed the Christian religion over the broad area of the world, covered by its imperial authority. The *cross* and the *eagle* had an equal omnipresence in the Roman system. This race gave up the grand mythology under which its most heroic deeds had been done, and took up under its protection the Christian Faith, no farther paganized in doctrine and form than was necessary to adapt it to the acceptance of the motlied millions who had acknowledged the Roman sway. The catholicity of the Roman State and of the Roman Church were equal. When the genius of command had forsaken the Roman State it mounted into the Latin Church, and from a centralization ever characteristic of its inherent tendencies, governs its millions on territories not subject to the Roman crown. The historical value of the Christian idea which the Latin race has conserved, and for which it exchanged a noble, but, in moral power, an effete mythology, must be judged by the fruits produced, remembering also that the value of Protestantism had been unknown but for the older system from which it grew.

APPLICATION OF CHRISTIANITY.

In paganizing Christianity into ethnical notions, forms, and tastes, the superior metaphysical acumen of the Greek intellect was brought into requisition; but the Latin genius held command, ruled councils, and always was at hand with its great executive ability. The highest idea in the Latinized Christianity was this, that God, the Infinite God, had poured Himself out anew in His fullness in the person of Jesus, in all His disinterestedness, for the salvation of the world; that the supreme Divinity was concentrated in one grand sacrifice for the redemption of humanity.

The pagan system it displaced or largely

absorbed had in it no reproductive moral power. Julian, who tried to supply this element in the fourth century, utterly failed. It is certain that the nations out of whom the influences of progress have proceeded for the last one thousand years and over, have been Christian, either in the way of the Latin or the Protestant Church. Christianity, from the beginning, had reproductive moral power. Paganism had also its merits; and in this way its better elements were conserved, were permitted to take the form of a higher idolatry, till further culture should discharge them from duty. It is safe to assume that among religions Christianity is morally the highest; and it should be conceded that the Latin race created a church which, if it has not hitherto brought its millions up to the level of Christianity, it has brought them within the range of its teachings. As a missionary church among the heathen, it has wonderful adaptation and success, illustrating on a new plane, the motto, "*Similia similibus curantur.*"

THE ROMAN LAW SYSTEM.

4. In governing so much and so long, the Latin race has left the world a large legacy in the science of government or jurisprudence, so that no law school of the old world or the new can refuse to own this debt of obligation to the old Roman race. The Semitic mind, whose highest representatives are Jews and Arabs, had no such ability for large political combinations, and, indeed, knew not how to reconcile liberty and law in any clearly defined juridical science. The world has been largely enriched by Roman law, and to some extent by Roman literature. Seneca, as a moral teacher—a real protestant—became, from the most catholic stand-point, the property of humanity, the blood of the Latin race coursing in his veins. No race ever had such grand centers of power. The centripetal, more than the centrifugal, has marked the career of this people. Though disintegration and liberty are the greater needs of the hour and age, the time will come in the cycle of events that the world will need, most of all, the Latin tendency of union on a grand scale, a United States, it may be, of Europe first, and of the world finally, as cosmical bonds shall obtain place. Then it may be that this very race, which by

no means is to be blotted out, shall come forward with its cohesive, centripetal forces, and play a sublimer part than ever in the future construction of a cosmical commonwealth. Whether it does or not, the tendency and the lesson will be creatively present, and never entirely independent of what Rome has taught.

SELF-ANTAGONISM.

But the Latin church has been, through an excessive longevity of prerogative, the destroyer of the Latin race to a fearful extent, as witnessed in the case of Italy and Spain. The effects produced on the character of Austria, Portugal, Ireland, Mexico, and the States of South America, prove how fatal this politico-ecclesiastical despotism is to the growth of vigorous manhood, and of the inherent genius which mankind bring with them into the world. A sorry contrast between the old Roman under Jupiter, and the modern one under Jesus! or Peter! or, rather, under a hierarchy of priestly usurpations, with the like of which the Man of Nazareth had no atom of sympathy. More centrifugal forces, more democratic upheavals and disintegrations are what the invisible field marshal is asking for and is sure to get, till ample space is opened for *natural development*.

Goethe said, "Nothing is good for a nation which does not grow from its own kernal." The theologies of antiquity, the religions *forced* on the nations, do not grow from their own kernal.

THE TEUTONIC RACE.

I pass from such a review as I have been able to make of the Latin race to the Teutonic, whose history, from the remotest times, evinces individualism, and a positive dislike of such massive and despotic unities as Asia has ever gloried in, as the Latin race even, inherently tend to. The reason why Germany has hitherto found it so very difficult to realize anything like a *national* unity, is owing to this one cause. No part of Europe, or of the world, has had for a hundred years so much divergent thought in it, among its scholars and writers, as Germany. I read of the *Teutones* first of all as barbarians in the German forests, living as tribes, each independent of the rest, warlike, worshiping as honest heathen in sacred tem-

ples on the shores of consecrated lakes. I read that the love of nature distinguished this worship, and glowed in its adoring hymns to the Elements. How stood individualism then? So strong that in times of peace no man, however gifted, or born, outranked his fellows, or had any foothold for claims of superiority. Those ancient woods were *democratic*. Only in time of war, and under the pressure of military necessity, did those sturdy democrats brook a leader. They chose him, and conferred his distinction by raising him on a shield. When the war ceased his superiority ended. Here was disclosed the *root* that has borne, in later ages, about all the real freedom Europe has ever had, the root out of which all the Democracy and Protestantism now on earth has grown. In the world balance it is exactly from this quarter that the great *centrifugal* force comes in. The Romans did not fail to see the truth of this matter. Lucanus knew it well, and said,

"LIBERTY IS THE GERMAN'S BIRTHRIGHT."

Not his utopia, but his birthright. Florus saw how it was, and, when speaking of liberty, said, "It is a privilege which Nature has granted the Germans, and which the Greeks, with all their art, know not how to obtain."

Though the Teutons permitted conquered Rome to give them civilization, and in it a new religion; though from the Latin race they learned the lesson of imperialism, and had it in full triumph in certain periods of their history, the inherent genius of stock here described has never changed. *The genius of race never changes.*

England may sometimes, in her insular consciousness, forget her derivation from the old Teutonic fatherland; but minds like David Hume remember the rock whence they were hewn. "If our part of the world," said he, "maintain liberty, honor, equity and valor superior to the rest of mankind, it owes these advantages to those generous barbarians, the Germans." In the history of political ideas, in the characteristics of nations, the eagle eye of Montesquieu left few things unobserved. His verdict on this matter stands on record thus: "Liberty, that lovely thing, was *discovered* in the wild forests of Germany."

THE PROTESTANT REFORMATION

could not have appeared in any other race at the time it did, if at all. Luther had been as impossible at Rome or Madrid as oranges at the North Pole. The fathers of our own Republic, Franklin, Washington, Adams, Jefferson, with their associates, could have sprung from no other stock. Their ideas were Teutonic, the sacredness of the individual underlying all their reasonings. The dignity of human nature can not be sustained on any other postulate. In France, the only country in which the Latin race, for the last century, has really been alive, a paroxysm for liberty and equality has occasionally seized the masses, and hitherto only to end, as by fatality, in a new crown.

AUSTRIA'S SLOW PROGRESS.

Austria, a country of great resources, and numbering 36,000,000, produces no man of genius, and seems to incline, as by instinct, to the despotic side. Why is this? In fact not one-third of the population of this Empire is of Teutonic blood,* and the Latin Church, taken to the nation's heart and soul, has had the molding of its intellect and conscience for many ages. Is it to be wondered at that imperialism, in this case, should so persistently overshadow all democratic tendency? The natural and ancient character of the Teuton found its strongest contradiction in Austria; but the inconsistency is chiefly removed by the two considerations that the Empire is not, in any sense, predominantly German, and that the Latin race has, through a long past, had the charge of its education.

THE TEUTONIC PECULIARITY.

Perhaps I ought not to close the argument in favor of the leading merits of the *Teutones*, as respects essential liberty, without quoting the words of Guizot, who said, "The ancient Germans gave us the idea of *personal liberty*, which was theirs above all other nations."

Goethe, speaking of this individual tendency, said, "It caused the woeful variety of our literature; it leads poets on to *originality*, for every one believes he must have a fresh road for others to walk on; it causes the seclusion and isolation of our men of science, each of whom stands alone and con-

strues the world from his isolated position. The French and English stick close together and follow one another. They harmonize in a certain way, in their dress and behavior. But among the Germans every man follows the leanings of his own mind; every one seeks to satisfy himself rather than others." This tendency is generic, not accidental, and therefore must be endured.

The traits herein announced are closely allied to successful inquiry into Truth, and give to the researches of German scholars a fearless independence. For sincerity and love of Truth, it may not be too much to say, the Germanic peoples surpass their neighboring nations. The genius of a race is sure to culminate in a few highest examples. In poetry it may be claimed that no poet has arisen in the Latin race who can be called the equal of Shakspeare; and in heroism, no one example can be found of so high an order as Washington; and, probably, in theology it has no one author of the quality and comprehensiveness of Channing or Parker. It was said many years ago that the *roots* of the Tree of Knowledge were in Germany, its leaves and flowers in France, and its fruits in England. I know not that this will be esteemed just as regards France, whose scientists and thinkers have won high position in the republic of letters. But on close examination it would disclose the cause of great astonishment among the uninformed to find the extent to which the best books on science and philosophy in France and England are derived from the labors and researches of German scholars. Hegel most truthfully said that in philosophy the Germans had no occasion to borrow from their neighbors; in science, they borrow less, and suffer more through plagiarism than any other people in the world.

In Pritchard's researches into the Physical History of Man, Vol. III. p. 423, he expresses the following opinions of this race: "In two remarkable traits the Germans differed from the Sarmatic as well as from the Slavonic nations, and indeed from *all those other races* to whom the Greeks and Romans gave the name of barbarians. I allude to their *personal freedom* and regard for the rights of men; secondly, to the respect paid by them to the female sex, and the chastity for which

* There are in the Austrian Empire 9,180,000 Germans.

the latter were celebrated among the people of the North. These were the foundations of that probity of character, self-respect, and purity of manners which may be traced among the Germans and Goths even during pagan times, and which, when their sentiments were enlightened by Christianity, brought out those splendid traits of character which distinguish the age of chivalry and romance."

These opinions, pronounced by Pritchard, are authenticated fully by the concessions of the ancient Romans.

ROMAN GRAFTS UPON THE TEUTONIC.

The intermixture of the German stock with the Classic at the fall of the Western Empire, made a wide diffusion of the Teutonic element. On this point, Dr. Arnold said: "It affects, more or less, the whole West of Europe, from the head of the Gulf of Bothnia to the most southern promontory of Sicily; from the Oder and the Adriatic to the Hebrides and to Lisbon. It is true that the language spoken over a large portion of this space is not predominantly German; but even in France, and Italy, and Spain, the influence of the Franks, Burgundians, Visigoths, Ostrogoths, and Lombards, while it has colored even the language, has, in blood and institutions, left its mark legibly and indelibly."

It was, I have said, from the statesmanship of the Latin race that the Teutons learned how to form states and kingdoms. No kingdoms of Hanover, Bavaria, Saxony, or Prussia were possible to the Germany of those periods of which Hume spoke. Tribe conditions are preliminary and provisional in Nature's logic at forming nationalities; and the acquaintance of the two races began at the right time to enable the Germanic stock to receive the benefits of Roman statesmanship when these were most needed. *Now*, the best law schools in the world are Teutonic; in Germany, alone, there is far more law-science than the Latin race ever possessed. The great authors are of this stock, especially on the widest range of law, in the intercourse of nations, as the names of Grotius, Vattel, Puffendorf, Henecius, and Welcker suggest. Though the Teutonic has sat at the feet of the Latin race as learner in the science of government, it has enriched this science by additions which could have come from no

other quarter; the Magna Charta, Trial by Jury, the Act of Habeas Corpus, and the Declaration of American Independence—additions which have a strong Teutonic outlook, a jealous regard for personal liberty.

THE LANGUAGE.

The character of a people is always embodied in its Language; and the student of the Germanic tongue can not fail to see the solid strength and beauty that lie embedded in it. It is the *exact* language, truthfully fitted to the expression of definite conceptions, and the very last medium one would choose for the purpose of making words conceal thoughts. Its growth has been impossible from any other than a sincere and truthful race, in normal relations with nature. If the predominance of consonantal sounds in a language indicates predominance of *thought*, which is closely allied to solidity of character; if the predominance of vowel sounds in the use of spoken or written language betokens a corresponding fullness of emotion in the temperament of a people—positions which facts seem to verify—the Teutonic race must be judged, in regard to all solid elements, superior to the French, the Spanish, and the modern Italians, while it is clear that the ancient Latin language had all the dignity, vigor, and clearness which the intellect of the ancient Romans was known to possess. The Teutonic group of languages do not omit or evade consonantal sounds, nor find reason for sliding consonants at the end of words on to the vowels which begin the following syllables. Not mere euphony, but the truth governs Teutonic expression.

POPULATION—GROWTH.

In numbers it will be remembered that the Teutonic race exceeds the Latin by many millions, and the centuries will make the difference far greater. The Teutons are good colonists, the best; the Latins are not as good colonists, and can not so well diffuse their civilization on a grand scale. South America and Mexico make the decisive proof in the case of Spain; Louisiana, which never began to be a success till it was ceded to the United States by Napoleon, is sufficient evidence in the case of France; and Italy, with the petrified chair of St. Peter at its center, long since ceased to think about making colonies. The long and glorious career of the

Latin race is, so far as leadership goes, drawing to a close. The crown is being placed, by the hand of Providence, on the head of the Teutons, that the free development of humanity for the coming centuries may be guided by the best rule. Neither of these races have, as yet, thrown off the feudalism of the old times; but it is plain to see how these things will be merged, after a little, and from what quarter the emancipative influences will chiefly proceed. France will aid in the effort.

TEUTONIC CONSERVATISM.

Destiny, from the first, has united the Teutonic stock with the progress and conservation of *Liberty*. The saving of Rome from being divided up and devoured by Atilla and his Asiatic barbarians, through the battle of Chalons, a victory impossible without the aid of the Germanic allies, meant the conservation of civilization, and the extension of Christendom. This threatening deluge of Asiatic barbarism was thus stayed. But in our era, seven hundred and thirty-two, a terrible despotism from a fierce branch of the Semites threatened all Europe, in the Saracenic invasions. Having already subdued Persia, Syria, Egypt, and Africa; having crossed the Straits of Gibraltar and conquered Spain, it threatened to destroy all the Christian nations of the West. Whence came the check? A youthful prince of Germanic race, Karl Martel, headed the opposition, and, at the battle of Tours, in France, arrayed the nations of the North against the Moslems; "They, standing firm as a wall, and impenetrable as a zone of ice, utterly slew the Arabs with the edge of the sword." But for this victory, Gibbon thinks that the interpretation of the Koran might be taught *now* in the schools of Oxford, and that her pulpits would have been eloquent in demonstrating to a circumcised people the sanctity and truth of the revelation of Mohammed. Under Charlemagne, Charles IV., and Charles V., the Teutonic race received great lessons in imperialism—learned what massive unities are—a lesson necessary to its further civilization and statesmanship; but its radical genius, democratic as the stones and brooks, shall merge out of the old imperialism, both of church and state, and bravely lead the world's true culture.

MODERN DEVELOPMENTS OF TEUTONIC STOCK.

In speaking of the destiny which is committing the leadership of the world, for a long and indefinite period, into Teutonic hands, I would ask your attention to the two great divisions of this race, viz., those who still speak the Teutonic dialects, and continue to dwell in the lands of the original Teuton, and those descendants of theirs who speak the English tongue. These great divisions have been approximating toward an equality of numbers, the balance, however, being still, according to recent estimates, in favor of the primitive stock; but its majority, whatever it may be, is overshadowed by the certain accumulation of an increasing majority on the other side. The United States, and its ample Territories, as the new seat of the Teutonic race, will continue to draw from the old Fatherlands, till, from this source alone, the English language shall be spoken by the far larger part of it. History records the results that came of the Anglicization of the Teutons in Great Britain; results that, should Great Britain die to-morrow, the world would eternally remember and admire. The Teuton, on this island, became a different man without losing his identity. The genius of the race was there intensified and modified; blossomed in poesy and in philosophy before the Germanic fountains began to flow; in practical combinations of means and ends, in material enterprise, the English became the Romans of the West, and eclipsed all that lay in the range of their ancestral memories. Goethe said, "The English are grounded in the majesty of material interests." This is so, and it is the strength and glory of John that it is so.

THE TEUTON IN AMERICA.

As history has recorded the Anglicization of the primitive Teuton in Britain, so will it report to future times the Americanization of this stock, under modifying circumstances, more marked and manifold than those which wrought its changes in England. On this I need not dwell. It is enough to see that the Teutonic genius which has found development in its own Fatherlands, which has effloresced so grandly on the British Isle, is, in the New World, to make its greatest achievements, under an Americanization which uni-

fies the varied nationalities, and extracts power from each foreign contribution. The far greater resources of nature in the New World, the constantly improving system of popular education, and the greater liberty of the new situation, liberty being always the *organic law*, make this prediction nearly as certain as the astronomical forecastings of the return of certain cosmical orbs.

THE LATIN AND GERMAN POPULATIONS.

The total of the populations of Continental Europe, coming under the Ethnological classification of Teutonic, comprising Holland, Belgium, Switzerland, Denmark, Norway, Sweden, Iceland, North and South Germany, with the 9,180,000 Germans in the Austrian Empire, is, according to latest statistical reports, 66,407,887. Could we add to this number the Germans living in parts of the Russian Empire, in Alsace and Lorraine, the number would not fall under 70,000,000. The Teutonic populations speaking the English language in Europe, America, Asia, and the isles of the sea, numbers about 62,720,260, an estimate which deducts from Great Britain the 5,850,309 of inhabitants in Ireland, and adds to the result 1,000,000 for the population of Teutonic origin on that island, an estimate, it may be, entirely too small. The sum total of the two divisions of the Teutonic family, without making any account of the Teutons residing in the Russian Empire, or in Alsace and Lorraine, is 129,128,147. This report can not be far from the truth, though an exact census of races is a difficult acquisition, so commingled are the populations of the World. The populations of Spain, Italy, and France, allowing France 40,000,000, taking in Algeria and Corsica, and for Italy counting in the 5,007,472 over whom the Austrian scepter has been extended, amount to 78,669,603.

TENDENCY OF THE AGE.

The reason why one race, in preference to another, is called into position at the front, is, that the work to be done, demands its labor and leadership. The work most required by this and by coming generations, is the development of Science and of Liberty, the elevation and coronation of the masses of mankind on the basis of their natural rights, so that they shall cease to be the instruments of em-

perors, kings, and princes; in short, the work already begun shall reverse the lesson of history by making governments the instruments of the people. Hitherto, man has been cheap, and a stranger to the proper consciousness of his sovereignty. He never can know self-respect till the *magic* of thrones and scepters is utterly broken. The ambition of princes has summoned, at pleasure, the millions of subjects, naturally disposed to peace, into deadly conflict of horrid butcheries; and, but recently, Europe's noblest races were in all the miseries of a bloody war, not because the people on either side wanted it, but because the mad ambition of a single emperor declared it, and the people had not learned that the true seat of sovereignty was not in the Tuilleries but in themselves. No proclamation of war should, on any part of the globe, be valid, till voted on and ratified by the PEOPLE. The work to be done involves the establishment, in the universal mind, of the scientific basis of government, the demonstration of the respect due to the natural cosmical ties which make the human race a complex unit, an infinite individuality; the elucidation of the lesson that local patriotism is less than humanity; that as tribe conditions are preliminary to the formation of nationalities, so nationalities are preliminary to greater unities and wider relations, which shall obtain place, in proportion to the advances of the true political and social science; and especially must it so reconcile liberty and law, or the centripetal and centrifugal tendencies of man, as to balance the freedom of the individual with the authority of the state, as perfectly as these are balanced in the harmonies of the solar system.

The variety in unity, displayed in all nature, makes natural classifications of the inhabitants of the earth; and hatreds and dislikes are as unphilosophical as if the plants and animals of the different zones were the objects of these unhappy affections. The unity of the human race, it will be remembered, is more strongly marked than any other. Its variety is the natural display of its many-sidedness and manifold resources. New races will be produced, and old national likes will be lost in the changes of the future.

All superior races have been mixed races,

that is to say, several tributaries have united in one river of life. Hence, the traditions of preceding peoples in all the old seats of civilization, Egypt, Cashmere, Greece, and Rome. In Great Britain the illustration is clear, the tributaries to the national life being the Germanic tribes who migrated thither in the fifth century and after—the Normans (who conquered Britain in the eleventh century), originally from (Teutonic) Scandinavia, and modified by residence in Normandy—a rill of Roman blood, and a stream of the Celtic also coming in the Teutonic character of the English, always proceeding from these two great sources, Saxon and Norman. The Germans themselves were also a mixed race, at least a fusion of some conquering Asiatic people (it may be the Persians), with a strong type of aboriginal tribes in the German forests. Some derive the name *German* from the Persian word *Irman*, signifying a soldier. The number of Persian and Sanscrit words in the Teutonic dialects prove a very remote commingling of different peoples in the composition of the Germanic race. If there are parts of the earth that have never been successively overrun and settled by conquering peoples of foreign blood, as it may be in Africa and elsewhere, those parts are certainly the least illumined by the rays of civiliza-

tion. France, in whose life-veins the quick and passionate blood of the ancient Celt still rolls, with a fair tributary from the Roman stock, has in her national life a larger Teutonic element than any other member of the Latin fraternity, since the Franks, originally a confederation of Teutonic tribes dwelling on the territory lying between the Rhine, the Main, and the Weser, overran Gaul victoriously, and forced upon it the name of France, the land of the Franks. While this fact may not be entirely unrelated to the periodical recurrence of Gallia's exhilarating dream of liberty and self-government, each revolution proves that beneath the clear demand for greater political freedom, the boiling blood of the Celt, still strong in the arteries of his descendents, is sure to interfere fatally with any method for gaining it.

The civilization of the West, according to the old tradition of the Semites, that "God shall enlarge Japheth," must doubtless be the center and source of the world's rejuvenation and regenerative influences; and as the work of each people lives on in reproductive results after its nationality is lost, it is unwise to mourn over any changes that may occur in the department of cosmical leadership, the Dice of the God of nations being always loaded.

HUMAN SACRIFICES AND FANTASY SUPERSTITIONS.

THE difference between the heathen and our Christian religion may be seen as well in our lives and actions as in our different customs and creeds. The annexed engraving represents a devotee willingly going to her death. She dreads not to cross the dark valley, for a vivid faith pictures to her a "happy home in the summer land beyond."

The tide is out. A post is set deep and strong in the ground. Voluntarily the victim, comeliest of her kind, is bound to the stake, heroically welcomes the inevitable. The tide rises, slowly but surely, and in a few hours she sinks beneath the flood, if she have not much sooner become food for the prowling crocodile or the ferocious shark. Such is one of the fatal errors of the heathen "in his blindness," who bows down to wood and stone.

Turn again to the stalwart figure of the poor, ignorant, superstitious martyr, who, in the dawn of life, and in perfect health, throws life away through a foolish delusion.

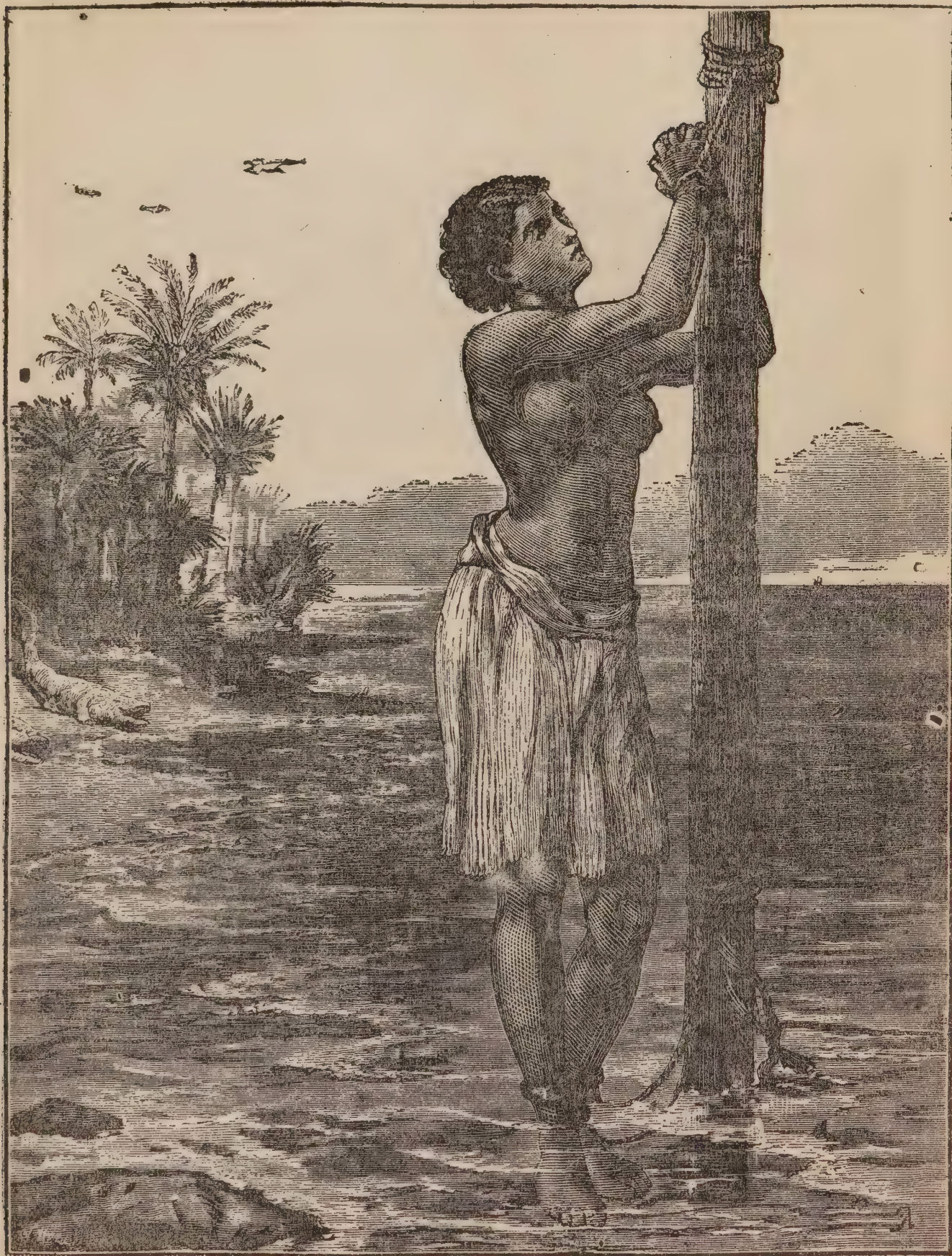
What think you, reader, as to our duty in the way of assisting, through missionaries, in opening the eyes of these spiritually blind people? Have we not good reason to be thankful for the privilege of living under the more enlightened Christian religion? And should we not assist in extending its blessed enlightenment to others?

Here is a statement from the narrative of the traveler who contributed these sketches for publication:

"Human sacrifices are still frequent in Western Africa, especially in the neighborhood of the Bonny River. The Ju-Ju religion is to the tribes somewhat south of

Ashantee what fetich is to the natives of the Gold Coast. The victim, generally a girl, is selected from the best and come-

eat, or if in the river for the crocodiles to devour. No modern Perseus has yet been heard of to rescue these dusky Andromedas of



A GIRL SACRIFICED TO JU-JU.

liest—we can not say fairest, though they have shades of color among them. The unfortunate creature is tied to a stake at low water, if on the seashore for the sharks to

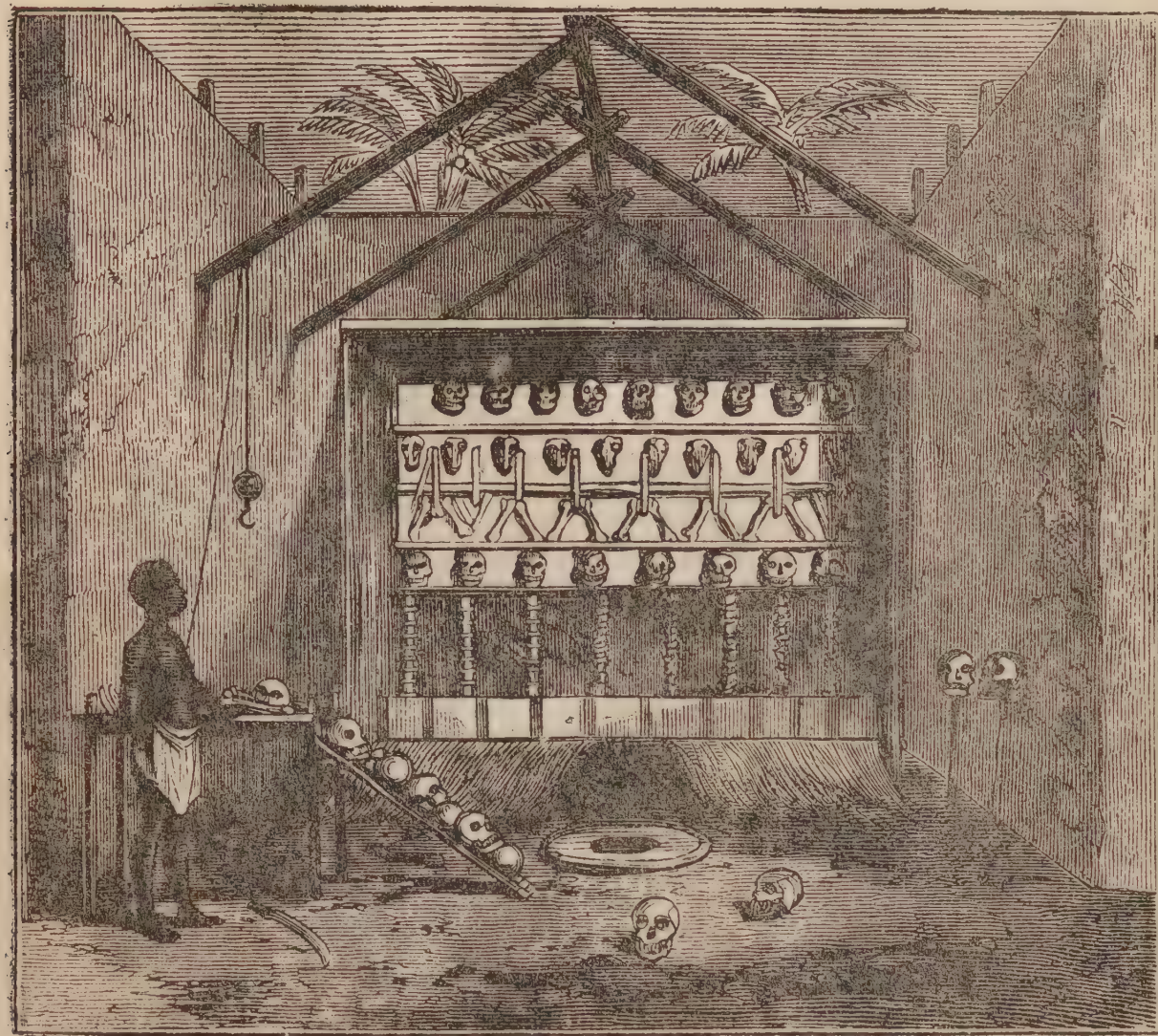
the nineteenth century. Some culprits, such as incorrigible thieves, are said to be punished with death in a similar manner; but the more general mode of execution is by

crucifixion on land, this awful death being accelerated by the wild dogs.

A JU-JU HOUSE.

"The Ju-Ju house or chapel at Bonny, the interior of which is shown in Mr. Harries' sketches, was a wattle-and-dab shed, oblong in form, and thirty or forty feet in length. At the upper end was a kind of altar, with a

from life. Between the two rows of human skulls was a line of goats' heads, also streaked with red and white. An old bar shot, used probably as a club to fell the victims, hung in a corner. Near the ground was fixed a horizontal board, or shelf, which was striped like the relics above. A sweep of loose thatch below this, like a fringe or



JU-JU HOUSE AT BONNY.

canopy or eaves of matting, and with a concave recess at the back. Across the front, underneath the roof, were arranged in two rows, impaled together, a number of fleshless human skulls. Some of these were painted, or otherwise decorated; one had a black imitation beard, which was doubtless a copy

valance, covered the base of the altar, but left an open space in the middle, where a round hole or basin, with a raised rim of clay, was made to receive libations and the blood of victims. There were spare rows of skulls, and others separate, upon stakes planted against the walls about the room."

EFFECTS OF CLIMATE ON COLOR OF BIRDS.
—The London *Graphic* tells us that a Parisian naturalist has been studying the influence of climate in producing a black hue in the plumage of birds. He observes that the quantity of black in their feathers is regu-

lated by the regions in which they live, and this is chiefly noticeable in the southern hemisphere, and particularly in New Zealand, Madagascar, and New Guinea. The white plumage of the swan of the northern hemisphere becomes of a pure raven hue in Aus-

tralia, while in Terra del Fuego and the adjacent portions of South America some of the wing feathers only are black, and in Chili the head and neck are like jet, the remainder of the body remaining snow-white. This is again visible in the parroquets in New Zealand, their plumage showing only small portions of bright red and yellow, and the rest being of a dingy green, deepening into black, while the same species in those islands of

the Pacific near Africa display similar signs. In Madagascar and the Mauritius, the Seychelles and the Comoro islands, black parrots are frequently met with.

[Blue-eyed people from temperate zones, moving into tropical countries, become the parents of dark or black eyed children, and, in the course of a few generations, the temperament undergoes marked changes. As it is with the plumage of birds, so it is with the complexions of human beings.]

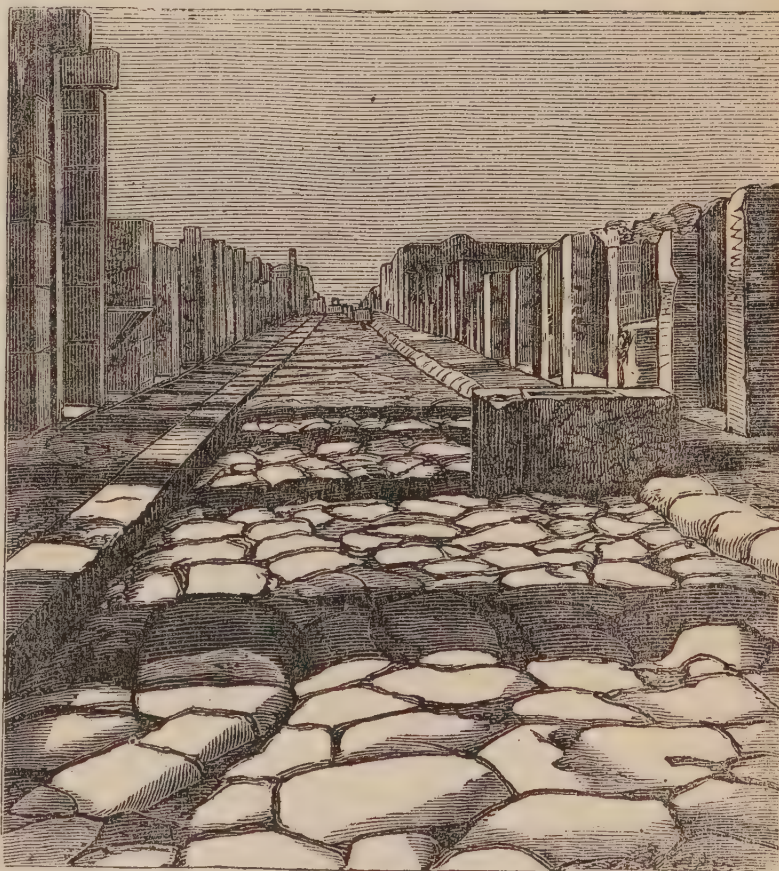
A VISIT TO POMPEII.

ON the 24th of last April, almost a month from the time we left New York, at about eight o'clock in the morning, the Isle of Capri, the present home of Garibaldi, hove in sight. Three hours later we were at our moorings. Six thousand miles of sailing separated us from home, and when once within the streets of Naples we found ourselves in the midst of a people as impulsive and emotional as the volcanic soil on which they live.

In Rome the mind becomes a vast canvas, in which for months is painted the successive scenes of each day, until at last the picture is complete. But Naples flashes upon the mind, and, like a sun-picture, is taken in an instant. Narrow streets, with sidewalks little needed and less used; thousands of cabs awaiting hire; donkies, horses, mules, cows, or oxen hitched indifferently to the same cart; women, with their peculiar costumes, carrying huge burdens on their heads; lazy men basking in the sunshine; ragged boys and deformed beggars—such is Naples.

On the morning of our second day, preparations were hastily made, and soon we were off for Pompeii. Three ladies and four gentlemen constituted our party; two carriages sent the sound of rolling wheels to join that of hundreds of others, whose echo was lost in the bustle and noise of narrow streets. Pompeii is thirteen miles distant, and seven or eight miles of our ride along the bay appeared one unending street. Portici, with its successive quarters, each overlapping the other, seemed but a supplement to the strange sights of Naples. The noisy groups of *lazzaroni*, the discordant cries of the women at the fish-market; the jingling

bells of horses, resplendent with a profusion of brass; the startling discord of some donkey asserting his independence; the clamor of beggars, whose plaintive tones and dreadful deformities excite a reluctant compassion—such sights, such sounds, at the same instant addressing themselves to the senses of a stranger, quite distract and overpower him.



STREET IN POMPEII.

To our left lay Vesuvius, quiet and sublime. Clouds veiled the crater, and down the venerable sides hung the black drapery of its lava floods, sloping and lost in the verdure of fields and vineyards. Farm-houses and villas skirted the base, while others, creeping far up the mountain, seemed almost to mock the slumbering monster. Herculaneum tells of former

convulsions; Pompeii disintombed rears its funeral monuments in full view; but the inhabitants, possessed of careless security, live, and many die, unconscious of the fearful fury that slumbers beneath their feet.

Eleven o'clock found us at the office, where we paid two francs each, which secured both tickets and a guard, whose business it is to prevent travelers from exporting the city from Italy to America. After some refreshments at the hotel by the wayside, we crossed the road by an ascending path, entered a field waving with wheat, and we were within the walls of Pompeii. The mind hurries back to the 24th of August, in the year 79, when, not long after mid-day, Vesuvius broke the repose of untold ages, and with fearful energy resumed his ancient reign of fire. The long slumbering echoes of his power again thundered in the heavens amid lightnings and earthquakes and the profoundest gloom, rushing torrents rolled down the mountain, earth and ashes rose from the crater and then fell a fearful fall, burying temples, theaters, and the habitations of men. The darkness that then settled upon Pompeii has lasted almost eighteen centuries, and beneath our feet slumbered no small part of the ruined city.

A short walk brought us to the great Amphitheater, located in a remote portion of the city. Here twenty thousand spectators were accustomed to sit, gazing upon the fierce encounters of gladiators. In this arena the blood of men mingled with that of beasts; the discordant hisses of the multitude strove to shame the last gasping struggles of the conquered, while words of cheer and deafening applause greeted the conqueror. At either hand an entrance; through one the gladiators entered, and through the other was borne those fallen in combat. The thirty-five tiers of seats that rise one above the other, are divided into three sections, separating the different classes of citizens; and above all a grand gallery for the ladies. The elevation that separated the spectators from the beasts in the arena is so insignificant that I feel confident I should not have cared for a front seat, nor would the ninety-six vomitoria, or doors, seem too many should a lion overstep the arena and leap into an American audience.

On account of the various notices found in the city, it has been supposed that on the day of the fatal eruption a gladiatorial contest was in progress, yet only five skeletons were found in the Amphitheater.

In all about five or six hundred bodies have

been disintombed. Of some only the skeletons remain, while others are imprisoned by much of the same stony lava that burned them to death.

A short walk brought us past the "Tragic Theater," and then we were really in the streets of Pompeii. There was much of pleasure attending the realization of long-cherished hopes, and when we walked into the city something of surprise to find ourselves not descending by dark passages with lighted tapers, as at Herculaneum, but entering streets entirely freed from the ruin in which they had been buried. To an inhabitant of a country so new as our own, the antiquity of Pompeii, and the thought of walking on the pavements and in the very streets trod by the Romans long before the birth of Christ, add not a little of interest. The deep ruts worn in the hard lava of the streets; the cavities that, by the continual stepping of horses had been ground into the stones of the elevated crossings; the thick paving of the sidewalks, in places almost scoured through by hurrying feet; these and many other things give evidence of the life that once inhabited the dwellings and shops and stores that crowd every avenue.

In the year 63, of our own era, an earthquake ruined many of the public buildings, some of which were not wholly restored when on the 24th of August, 79, a more terrible pall spread over Pompeii. At this time the lightnings and earthquakes were followed by a shower of ashes that soon fell to the depth of three feet. During this time most of the inhabitants fled; some took refuge in cellars, others collected their treasures, and when about to flee were overtaken by a shower of scalding mud and red-hot pumice-stone, that buried them by the side of their treasures, and covered the town to a depth of seven or eight feet. The terrors of that fearful day were not passed. Again ashes and red-hot stones fell like hail, and when it ceased Pompeii was buried in the ruin that spread in all directions. Buried and lost, the city was consigned to oblivious forgetfulness, until in 1748 the discovery of statues and bronze utensils attracted the attention of Charles III., or rather of the world, and the excavations were begun. Now the superincumbent mass, about twenty feet thick, has been removed from what is supposed to be about one-third of the town, leaving the walls of some of the houses and public buildings almost perfectly preserved. The houses, closely joined, and the city compactly built, appear to have been three-fourths of a mile long, and

a half mile broad, with from twenty-five to thirty thousand inhabitants.

To describe the architecture, the public buildings, and places of interest, would be a recital of details, with such painful minuteness that the ideas would seem as confused as those of the traveler after a hurried visit among houses and theaters and temples and basilicas and forums, until "the mind becomes an architectural chaos, in which columns, pilasters, pediments, mosaics, statues, and pictures whirl and dance, like the broken images of a feverish dream."

For the most part the buildings are of brick, covered with stucco, and as the excavations have progressed names have been suggested by the discovery of some statuary or painting. The floors are of marble mosaics, and at the threshold is often some pleasing device or word of "welcome." At the house of the "Tragic Poet" was formerly represented a dog, with the warning, "Care Canem"—beware of the dog. Perhaps the most comfortable and most used part was the outside of the inner portion of the house, or, in other words, the houses of Pompeii, like those of Bible times, were built around an open court. Mosaics, paintings, statuary, and fountains rendered them attractive, and here the family sought both light and air; for at these early times in Italy a window was merely a hole in the wall. The decorations and embellishments of the various apartments still remain. We hang pictures and engravings against the walls; they painted the pictures upon the walls themselves. We spread costly carpets; they trod upon marble slabs and inwrought mosaics. We shade and adorn our windows with rich curtains; they, for want of glass, dispensed with both windows and curtains.

As the people of southern Italy are, to-day, a people of out-of-door habits, so were the inhabitants of Pompeii. "Their time was spent in places of public amusement, at the baths, in courts of justice, at the temples, in lounging about the forum and basking in the sunshine." Home was a place to eat and sleep. They knew not the might that makes the English and American governments durable and lasting, so long as the homes of the people shall continue the impregnable Gibaltars of the nations.

Their city had accommodations for all of its inhabitants at places of public amusement. The Amphitheater would seat twenty thousand, the "Great Theater" five thousand, and still fifteen hundred in the smaller theater.

These three places alone would accommodate all, and some think more than the inhabitants of the entire city. To my mind, this is a stronger proof of the social depravity of the Pompeinians than all the lewd statues and vulgar paintings combined.

When the excavations were begun, and the ponderous pall of death was lifted, wonders long veiled thrilled the beholder. In what was doubtless the Exchange building, lay a flight of steps unfinished, but the marble slabs are at hand; on one a black mark to direct the chisel of the sculptor. In the apartments of the priests, near the temple of Isis, a table spread, as the remains show, with chicken, and fish, and eggs, bread, wine, and a garland of flowers. Here also the body of a man, near which lay a sacrificial axe, with which he had cut his way through two walls, and perished in his struggles to cut through the third. The body of another priest lay near, seeming to have perished in his attempts to save the treasures of the temple. At his side, wrapt in a cloth, lay three hundred and sixty silver coins, together with some of gold and bronze. In the bakery, the flour-mills still standing; the stables for the donkies which turned them. Here the vases for water, and there the jars which contained the flour; while heaps of grain await the return of the miller. In the sculptor's shop, tools with which the work was to be executed. Pieces of sculpture in various stages of perfection; blocks of marble, one partly sawed, with the saw still sticking in it, doubtless as relieved from the grip of the workman when startled by the first shock of terror. In the cells sat the skeletons of three prisoners, with their bony legs still fastened in the stocks.

Soon we were in what by many is thought the most beautiful portion of Pompeii—"The street of the Tombs." Here, just without the gates of the city; the Appian Way is bordered with tombs, for seventeen centuries protected from the weather and mutilation. The monuments are of marble, perpetuating by Latin inscription the memory of those to whom they were erected. The platform of masonry, in which was burned the bodies of the dead; tombs of strange devices; the Columbarium, or vaults for the reception of the ashes of the dead; these all in a fine state of preservation.

Wearied and hungry, the last place we visited was through a narrow passage, descending into a vaulted cellar. This is a beautiful villa, known as the house of Diomedes, so called from the fact of the family of Arrius

Diomede having been entombed just opposite. Here were found the bodies of seventeen women and children, who had provided themselves with food, and sought, in this cellar, to protect themselves from the long pent-up fury of the volcano. The ashes penetrated the openings designed only for the admission of light, and too late the terror-stricken party sought to escape. This was the wine-cellar, but when these silent vaults were excavated, here stood the skeletons of seventeen of the unfortunate victims of death. The mistress, with her head and back to the wall, stood with out-stretched arms; around her stand what once were her slaves, but now her companions in death. Near her stood her daughter, upon whose bracelet was engraven the name "Julia," and close at hand the bony frame of one holding an infant in her arms. Oh, what images of terror; what fearful monuments of that sad night of woe! What must have been the horror and alarm of this group of human be-

ings, with devastation and destruction folding in upon them!

Beyond the wine-cellar, at the gate in the garden, death overtakes the fleeing master and his servant. One hand grasps a key, while the other holds a bag of coins and jewels. Near lay vessels of silver and bronze, probably borne by the slave, who also carried a considerable quantity of gold and silver coin.

Near this villa is the niche, or sentry-box, in which was found the helmeted soldier clasping his lance. The first symptoms of reviving terrors must have awakened the remembrance of those convulsions that had almost laid the city in ruins sixteen years earlier. The long pent-up furies of Vesuvius broke forth, but there, amid the ruin, stood the Roman sentry, nobly dying at his post.

After three hours of deepest interest among the monuments of antiquity, the carriages were entered at the Herculaneum gate, and our party sped away toward Resina.

SYLVANUS STALL.

Department of Physiology—Our Sanitarium.

Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

DOES NATURE CURE?

SOME twenty years ago, we published, in this journal, a portrait and sketch of a physician by the name of Burdick, who conceived the idea that he could effect cures without the use of drugs of any sort. His practice in Western New York was considerable. He was a healthy, jovial, and happy man, with strong, practical common sense, and became known as the "Laughing Doctor." His method was, on visiting a patient, to divert his or her thoughts from *themselves*, by relating funny stories, and getting the patient into a hearty laugh. His antidotes were anecdotes, to be taken so as to be shaken, once in "so many minutes precisely." The absurdity of the whole thing is said to have proved remedial in many instances; not that laughing cured, but that it put the patient into a state of mind or a condition of body favorable for *nature* to operate and restore the patient. Here comes in the *Oneida Circular*, which publishes the following:

"Professor Tyndall, while in this country last year, visited the Falls of Niagara, when, reaching the Cave of the Winds by descending Biddle's stairs, he conceived the idea of attempting to pass under the blue waters of Horse Shoe Falls from that point. He found a guide who was willing to make the attempt with him, and together, the next day, they passed through the mist and foam of the roaring cataract, reached the desired point, and returned in safety. In describing his emotions at one point in his perilous journey, he remarks as follows:

"Here my guide sheltered me again, and desired me to look up; I did so, and could see as before, the green gleam of the mighty curve sweeping over the upper ledge, and the fitful plunge of the water as the spray between us and it alternately gathered and disappeared. An eminent friend of mine often speaks to me of the mistake of those physicians who regard man's ailments as purely chemical, to be met by chemical

remedies only. He contends for the psychological element or cure. By agreeable emotions, he says, nervous currents are liberated which stimulate blood, brain, and viscera. The influence rained from ladies' eyes enables my friend to thrive on dishes which would kill him if eaten alone. A sanative effect of the same order I experienced amid the spray and thunder of Niagara. Quickened by the emotions there aroused, the blood sped healthily through the arteries, abolishing introspection, clearing the heart of all bitterness, and enabling one to think with tolerance, if not with tenderness, of the most relentless and unreasonable foe. Apart from its scientific value, and purely as a moral agent, the play, I submit, is worth the candle. My companion knew no more of me than that I enjoyed the wildness; but as I bent in the shelter of his large frame he said, I 'should like to see you attempting to describe all this.' He rightly thought it indescribable. The name of this gallant fellow was Thomas Conroy."

To which the *Boston Journal of Chemistry* adds:

"There is in this graphic statement of the eminent *savant*, a hint at some truths which, physiologically considered, may be of supreme importance. 'By agreeable emotions, nervous currents are liberated which stimulate blood, brain, and viscera.' The 'emotions' of every living person are unquestionably of more importance to his health, happiness, and well-being than most physicians suppose. Agreeable emotions are

curative in their influence, when coming to the relief of suffering invalids. Disagreeable emotions produce disease in individuals who, uninfluenced by them, would be in sound health. A dyspeptic who, at his own table, under the influence of depressing emotions, is unable to partake of an ounce of food without subsequent distress and pain, is able at the table of a friend, under different circumstances, to eat a hearty meal without discomfort. It is a mistake to regard most diseases as resulting from chemical derangements of the system, and it is a mistake to meet a majority of diseases with chemical remedies. We have known physicians who exerted a moral influence over their patients, which gave them a success more gratifying and positive than ever resulted from the administration of any drug. The mind, in its connection with the body, exerts a controlling influence; and one of the great secrets in regard to securing health and longevity is to train the emotions so as to keep them outside of the cloud which hangs ever ready to darken our mental and moral horizon."

[All this is entirely reasonable and hygienic. Thus it is given to man to control his emotions and his thoughts, as his actions. If his senses be not blunted or weakened by stimulants, narcotics, or poisons; if he be what God intended him to be, he will rise superior to fear, hate, passion, malice, despondence, and live in the perpetual sunshine of health, bright hope and gratitude to God for the privilege of existence.]

THE NEW PHRENOLOGY.

[The *Scotsman* newspaper bears about the same relation to Edinburgh and Scotland as the *Times* to London and England. Each within its sphere is regarded as authority on questions political or otherwise. The following reflections will have weight with many who hold to established facts, no matter how many new speculations or theories be announced. We take pleasure in placing this Scottish testimony on record for the encouragement of the wavering, believing that the old Phrenology will stand firmly against all assaults, especially those of assumed friends.—ED.]

THE whirligig of time brings about many a strange turn, and among the most strange is the new *furore* for establishing "centers" in the brain for the manifestation of voluntary motor action, which has cropped up among

medical men. The time is not far gone when teachers of anatomy and physiology maintained that the hemispheres of the brain performed their functions, whatever these might be, as simple organs, and when, as a rule, the medical mind scouted the idea proclaimed by Gall and Spurzheim, that the brain is not a single but a compound organ, the different portions of which subserve different functions. Slowly, however, the belief has established itself that the doctrines of the phrenologists have this foundation in fact, that the brain is not a homogeneous organ, but that the different mental powers are linked with different

portions of the cerebral substance. With this admission, the main doctrine of Phrenology takes its place as a recognized truth, and when Dr. Carpenter still takes credit to himself for having given the *coup de grâce* to the doctrines of Gall, Spurzheim, and the Combes, he merely shows that he totally misapprehends his own position and influence, and the importance and vitality of the views which he imagines he has extinguished.

At the recent meeting of the British Association at Bradford, Prof. Rutherford, of King's College, London, when alluding to the recent physiological researches of Dr. Hughlings Jackson, Messrs. Fritsch and Hilzig, and Prof. Ferrier, also of King's College, declared there could be few so important studies as the mapping out of the brain to show the various centers of cerebral functions. Upon these studies, he maintained, will be founded a new and true system of Phrenology. "The various mental faculties will be assigned to definite territories of the brain, as Gall and Spurzheim long ago maintained, although their geography of the brain was absurdly erroneous, and their notions regarding the indications afforded by the configuration of the skull ridiculous." Dr. Rutherford does not tell us how he has come to the conclusion that Gall and Spurzheim's geography of the brain was absurdly erroneous, nor why the indications afforded by the configuration of the skull are ridiculous. Many able observers have come to the conclusion that a well-developed forehead is a sign of high mental power, and it is not easy to see anything ridiculous in this assumption. That Gall and Spurzheim's cerebral geography was in various ways defective, is highly probable; but still it may be doubted whether it will, in the long run, be found more absurdly erroneous or even as absurdly erroneous, as the new and true Phrenology which Dr. Rutherford advocates. What is this new Phrenology? It is founded on experiments on living animals, and its most recent and also its chief exponent is Prof. Ferrier. The animal is narcotised by chloroform or ether, and a portion of the skull-cap is removed, and the brain exposed. The functions of the different parts are then determined by stimulating the surface by electricity, and in this way an action, supposed to be analogous to the natural spontaneous action of the brain, is produced. According to this doctrine, therefore, whatever phenomena may be observed will indicate the function of the part that has been stimulated. Prof. Ferrier imagines he has succeeded in proving that "the an-

terior portions of the cerebral hemispheres are the chief centers of voluntary motion and the active outward manifestation of intelligence, and that the individual convolutions are separate and distinct centers." But the experiments on which these conclusions are founded appear to us to be open to a thousand different sources of error; while the conclusions themselves are in many respects far more open to ridicule than the views of Gall and Spurzheim. The old phrenologists drew their deductions from the mental manifestations of uninjured and healthy brains. They sought to connect function with development, and if they failed which we are far from admitting they did, we still could not agree with Dr. Rutherford in seeing anything ridiculous in the failure. But how is it that Dr. Rutherford, with his aptitude to discover the ridiculous, sees nothing to excite his wonder in the doctrines of the new and true school of Phrenology, which undertakes to show that there is a special convolution for wagging the tail, another for cocking the ears, another for closing the eyes, another for extending the paws, and so on? In fact, if we accept their experiments as indicating the true functions of the brain, we must admit that by far the greater portion of the cerebral hemispheres is used up in constituting centers of motion, and that scarcely any portion is left over for the manifestation of the intellectual and moral faculties. Dr. Ferrier's idea is, that the stimulation of the brain by electricity excites the capillary circulation, and thus rouses the portion of the cerebral substance which is stimulated to its natural action. Accordingly, when the electrodes are placed upon this portion of the brain, and the eye is closed, or upon that portion and the tail is wagged, we are supposed to have discovered the functions of these portions of the brain. It seems to us that this conclusion is eminently unsatisfactory, if not eminently ridiculous. In the first place, how can we tell that the phenomena consequent on the condition which the electrical stimulation produces are really analogous to the natural function of the cerebral substance? Again, how would other stimulants act? Would the application of heat, for instance, be followed by similar results? If not, why not? Again, what would be the result if the stimulus were applied, not to the surface, but to deeper portions of the cerebral substance? Surely, cerebral action is not merely skin-deep. And, lastly, what modification in the configuration of the brain should we expect in Manx cats, which are without tails, to respond to the tail-

moving convolution? We are far from calling in question the accuracy of Prof. Ferrier's observations, but the more the whole subject is considered, the more unsatisfactory and doubtful will his conclusions, it seems to us, appear. Man's pre-eminence in the scale of creation does not depend upon the pre-eminent development of his muscular aptitudes, but upon his high moral and intellectual attributes. Living things so small that the naked eye fails to recognize their existence, are endowed with the faculty of motion in a wonderful degree, and the complicated movements of the dragon-fly and other insects, are associated with various centers which are comprised in a bit of matter less than a pin's head. What need, then, to have in the higher animals distinct centers for every paltry motion they have to perform? When Dr. Ferrier finds that by stimulating a certain convolution of the brain the dog wags its tail, is the conclusion at once to be adopted that he has thus discovered the motor and intellectual center of the tail? Is it not just as possible that the movement of the tail which follows the stimulus is the result of a moral

feeling which has thus been excited? The wagging of the tail indicates pleasure in the dog. You speak to him and pat him, and he responds by wagging his tail. The old phrenologists would have said that you addressed his love of approbation, and that the stimulus of this organ in its turn stimulated the motor centers of the tail to action. Again, when you scold him, he puts his tail between his legs, and sneaks away. The old phrenologists would have referred this different manifestation to the action of Cautiousness upon the motor centers; but Dr. Ferrier will, we fancy, have to look out for a special tail-retracting convolution. It does seem to us that these modern views of mental action rest on a narrow mechanical basis, which will assuredly break down under investigations conducted in a broader and more philosophical spirit. At the same time, we thoroughly recognize their value as confirming the doctrines that the brain is a congeries of distinct nervous centers, and we give Prof. Ferrier all due credit for the new path of investigation to which he has directed our attention.

HOW TO GOVERN AND TRAIN CHILDREN.

HENRY WARD BEECHER once said in a sermon: "The woman who has brought up and properly governed and trained seven sons, is fit to be President of the United States." There certainly is no service one can render the world more useful and lasting than that of guiding young human beings in a virtuous course, and training them to perform properly the duties they owe to society and to God.

The wisest selfishness is that which remembers and respects the rights and interests of others. If a child be so influenced by his early surroundings that his own wants and pleasures only are considered, when he enters upon the rivalries of life he will become the tyrant of others if he be strong, or their despicable victim if he be weak. He who is just and kind toward others will secure their friendly cooperation, will be invited to profitable and pleasant employment, and to prosperous and agreeable partnerships; while he who is hard, selfish, and unkind, will be elbowed out of places and his presence dreaded and detested; and want and disgust will make him an Ish-

mael; and, if lacking in talent, he will be dependent upon chance or dishonesty for a meager support.

PARENTAL SELF-CONTROL.

SELF-CONTROL is one of the first and most useful lessons for the child to learn, and one requiring as much wisdom and patience on the part of the parent and teacher to impart as any other. Indeed, parents and teachers, unfortunately, often find it difficult to practice the virtue they seek to inculcate in the little folks. Those who have not been trained to self-control are not likely to train their own children in that virtue. A story is told of a very profane man whose boy had learned to swear. But the father knew it was a bad and wicked habit, and wished to break his son of it, though he continued to set the example. He took the boy out to a thicket, where he could get a plenty of sticks to whip the bad habit out of him. As it happened, the thicket was only a hundred yards from the houses of several of the neighbors, who could hear the blows and hear the father swear at his boy for swearing, and then whip some more and stop and

swear again to impress the boy with the turpitude of his misdoings. This was about as ridiculous as was the noisy speech of the man at the peace society's meeting, in which he stated that he was for peace, and he "was determined to have peace if he had to fight for it."

Self-control, however, does not relate merely to the curbing of the passion of anger. One may be sensitive as to place, position, preferment, praise, property. To subject one's pride or pleasure to the pride or pleasure of another, in a conciliatory and kindly spirit, may be, in some, so easy and natural as not to rise to the dignity of a Christian grace; but in the average of us, such self-abnegation as would lead us to so high a virtue might well be reckoned as a Christian grace. The more effort one has to make to subdue and rectify natural infelicities of disposition, the higher the grade of virtue should be esteemed. If one rises from ignorance, poverty, and other unfavorable associations to education, wisdom, wealth, and honor, the world accords to him special respect for the marvel of successful effort exhibited.

PARENTAL CULTURE—GRACE.

To most of us, graces come like crops to an ungenerous soil—by much culture, work, and waiting. No one knows better than the good mother how much prayer, patience, and perseverance are required to guide, regulate, and develop to noble manhood or womanhood a child of ordinary capacity and disposition.

Self-control presupposes wrong tendencies—something to be avoided without, and something to be restrained and regulated within. If we were born with sound constitutions and with mental tendencies in harmonious and right relations, our life might glide spontaneously toward the true and the good, and self-control would not be required. But we are all, more or less, out of balance, and it is the office of training and education to find out these excesses and weaknesses, and modify them.

How can a child be taught to regulate its impulses and avoid boiling over through its strong feelings, or breaking down through its weak ones?

Is a child tender, timid, and meek? It must be soothed, encouraged, and strengthened by kind and hopeful treatment. But how often do we see the strong and selfish overbear the weak, and grasp all the rights and conveniences! The cow that has no horns is gored by every pair of horns in the drove, though age and weight are on the side of the defenceless.

An intellectual child may be found in a group of headstrong, combative brothers and sisters, and it has to go to the wall whenever muscle and might are the arbiters. Such a child should be trained to assume and protect its rights—not to fight, necessarily, but speak and act in his own defense, and in protection of his rights and interests. Horace Greeley, as a child, would not fight, but he would stand his ground and hold on to his own to the last; and, on the whole, probably obtained respect for his rights and interests about as thoroughly as he could have done by the usual belligerent methods. His course would awaken all the good qualities of his rivals, and tend to depress and shame down their baser dispositions; and when it was understood that he would not give up a point, but would not fight, brave but selfish natures would not invade him or ruthlessly use might against right. Let the timid and meek be trained thus to do, and let the sensitive be trained by exercise and by assuming responsibilities to take stronger positions and rise above their dread of contact with the strong and rough.

A man who never drives anything but a well-trained horse, will be sadly put back if he undertakes to drive an untamed, headstrong young team—but six months of such work would toughen his tender hands, strengthen his flabby muscles, and fortify his mellow spirit, and call out his manliness and powers; so a child that has a tender nature should not be brooded too much, but be pushed out of the nest and taught to work its way, and thereby learn to meet the difficulties and infelicities of life as bravely as possible, and every new effort will show increased strength and confidence. A hasty temper is the besetment of many. Patient, gentle treatment of such persons will, in the first place, avoid exasperating them, and, in the second place, awaken the kindly qualities. In this manner the better nature is made stronger by use, and the irascible temper is kept cool, and thereby weakened. Faculties, like muscles, are made strong by use, or reduced in strength by disuse.

[To meet the wishes of many parents and teachers who find it difficult to manage certain ones of their children, we shall keep this department of the JOURNAL open for a more complete discussion of the whole question of GOVERNING AND TRAINING CHILDREN. We invite brief questions from our readers on the subject, to be replied to in following numbers. PHRENOLOGY will always prove eminently useful in this important interest.]

YALE METAPHYSICS—PORTER ON PHRENOLOGY.

WE quote from page fifty-five of Dr. Porter's "Human Intellect," published in 1868, the following objectionable remarks on phrenologists and their belief:

"§ 42. *The Phrenological Theory.* The so-called phrenologists constitute a distinct branch of the cerebral school, if, indeed, their doctrines have not been superseded by the more exact and comprehensive knowledge of the brain, on which the cerebralists build. To the claim of the phrenologists to have established a science of the soul, the following objections may be urged: 1. They have not proved that the protuberances of the brain, or the cranium, on which their science is founded, correspond to the psychical powers or functions which it is claimed they decisively indicate. 2. The classification of these very psychical powers which they adopt is illogical, inasmuch as it is chargeable with not a few cross divisions. 3. The classifications and arrangements of the whole science rest for their verification on the knowledge of the soul which is given by consciousness. It requires this knowledge to supplement its observations of the cranium. It is this knowledge which furnishes all the facts which are to be explained, and is the test of the correctness of the classifications. Were Phrenology established, it would not be a science of its own facts; it would serve only as a guide in the use of certain external indications or explaining the psychical characteristics of individuals."

This is all that the so-called President of Yale College knows about Phrenology. And it is a discreditable statement, both in matter and manner. We hasten to add that Dr. Porter has a perfect right to be called the President of Yale College, and that we said "so-called President," not because we supposed him an impostor, but to show him how his innuendo sounds.

But his statement is a shallow and ignorant one; shallow, because it is mostly mere contradiction; ignorant, because Dr. Porter would not venture on such gross misstatements if he knew what he was about. We may neglect the contradictions, the denials that we "have proved," etc., the imputations of illogicality, cross-classification, and so on.

But some of the more reasoned statements are too wrong not to be exposed. These statements, as will be seen on carefully reading the last three sentences of our extract, imply the following assertions: "Phrenology, if true, is not 'a science of its own facts.' The reason is, that it verifies by an analysis of the mind depending on the consciousness, the results of its observations on the brain and skull; but this analysis is no part of Phrenology; therefore, Phrenology is not," etc.—*Q. E. D.*

Evidently, President Porter does not know that the very strength of Phrenology is precisely what he says it has not! No science is a clearer instance of correct method than Phrenology, which observes both brain and mind, which alternately judges of the brain by the mind, and of the mind by the brain; which, moreover, corrects the result of their mutual correction by observing the influence on both mind and brain of the rest of the body, and of the world around it, too,—and *vice versa*. In other words, Phrenology is and always has been both a psychology and a craniology, and President Porter ought to have known it.

But only think of finding fault with Phrenology because it must rest for verification "on the knowledge of the soul which is given by consciousness!" Pray, on what else than consciousness does any knowledge or verification whatever rest?

President Porter's own theory of the mind is of the Scotch school. His book contains an introduction on psychology (which includes the extract above commented on); but it is mainly occupied with a discussion of the nature and operations of the intellect alone. To discuss all the matters alleged in a closely-printed, large octavo volume, of 673 pages, would be tedious. What we intend chiefly now is, to say a few words on his classification of the mental powers, which is that used by a great many other writers on mental science. He says: "To know, to feel, and to choose are the most obviously distinguishable states of the soul. These are referred to three powers or faculties, which are designated as the intellect, the sensibility, and the will" (p. 49). And Dr. Porter goes

on to assert: "This three-fold division of the powers of the conscious *ego* is now universally adopted by those who adopt any division or doctrine of faculties."

Not to observe that the phrenologists do adopt a division of the faculties which is not this, one single short sentence will show the worthlessness of such a description of the soul as that, viz.: It omits *action*. And action is all that proves the existence or explains the powers of the mind. Phrenology observes the action of the soul, and thus examines the mind by studying its effects on the legitimate subject matter of its activities. This is the way in which Newton studied gravitation; in which Le Verrier discovered Neptune; in which the spectroscopists of the last twenty-five years have developed the revelations of the sunbeam. In short, it is the only way in which we can obtain sound and safe and real knowledge about anything whatever. To know is not what Dr. Porter says it is, "a state of the soul"—it is a characteristic action of one part of the soul's faculties. Precisely similar is his error about feeling, which is not "a state of the soul," but the natural activity of one part of the soul's faculties. "To choose," his third "state" is, perhaps, a state; it is the condition of prepared resolve which, if the occasion comes, issues in action. And if it may properly be imputed to the whole of the soul—which Dr. Porter's term, "state of the soul," implies—this shows that it is improperly classed with knowing and feeling, which are not states of the whole soul, but activities of parts of it.

Another aspect of the doctor's erroneous analysis is, his assertion that the soul is one, in the sense that no part of it is or can be active while another is at rest; but that whatever the mind does, the whole of it does altogether, like Wordsworth's cloud,

"Which moveth altogether if it move at all."

Dr. Porter says (p. 41):

"We do not find that the soul is divided into separate parts or organs, of which one may be active while the others are at rest. * * * The whole soul, so far as we are conscious of its operations, acts in each of its functions. The identical and undivided *ego* is present, and wholly present, in every one of its conscious acts and states. We can find

no part, we can infer no part, which is not called into activity whenever the soul acts at all. We can discover and conjecture no organs, of which some are at rest while others are in activity."

Elsewhere Dr. Porter says that the soul can be knowing and feeling at the same time. He is thus left in the absurd attitude of maintaining that the soul can be at one and the same time wholly engaged in knowing and wholly engaged in feeling.

Any one who has ever rested his mind by change of its occupations will need no other contradiction of this doctrine of complete action. If the whole of the mind deals with each occupation, the change can not rest it. But if the mind works through a machine of brain fiber, capable of fatigue, and if the machine has one part devoted to one sort of mental activity and another to another, how clear and natural does the process of rest to the mind become by change of mental occupation!

To show the unsound and unsafe quality of President Porter's assertions, it is only necessary to examine his assumptions of such knowledge as is in the nature of things impossible to human beings. A well known and convenient test can be used to catch him in this conduct; it is only to remember the limit between essential and phenomenal knowledge. This limit is one of the primary conditions of sound psychological investigation, but it is one which Dr. Porter uses but little. No wonder; it can be satisfactorily set forth only by an exposition that constantly recognizes the brain as well as the mind, the body as well as the soul—in short, man as he really exists, instead of as a mere unintelligible ghost. Such a method will refute all the *skiopsychologists*—the ghost-mind-students, and President Porter among them, and will drive them to the phrenological method of investigating mental philosophy. President Porter's exposition of the operations of the mind, however, does not need the brain at all. The method is just as correct and useful as a chemistry without matter; as a political economy without esthetics or morals; as a morality that does not recognize temptation.

But no wonder (again)* he is afraid of the facts he is to deal with. He is afraid of the

very words—the very instruments—which he is to use upon them. He says (p. 29): “The student of psychology should place himself ever on his guard against the influence of the images and associations which are continually put into his mouth by the language which the necessities of his being force him to use.” As soon expect good work from an artisan who takes pains to be all the time frightened lest he cut his fingers with his own tools. The images and associations which the necessities of our being force us to use are our only instruments for knowing and learning. What we need is to understand them and their use, and then not to be on our guard against them, but to be perfectly familiar and easy in our use of them. Dr. Porter’s advice is just as absurd as to recommend a man to be always on his guard against his wife and children and all his particular friends, with whom, of all men, “the necessities of his being” call him to be on the most unguarded terms.

Such recommendations, however, while in themselves erroneous, have to a real mental philosopher a critical and individual value as indications. They indicate what also appears from the whole texture of this big book on the Intellect—to wit, that President Porter’s mind, while no doubt it has abundant excellences, is one which manages such abstract thoughts and speculations with very great difficulty, under unusual natural disqualifications; and that it had better be employed about something else.

But as to our limitations of knowledge. What we call knowledge consists in observing appearances, arranging names for them, and becoming able to occasion their production. We never reach an absolute knowledge of the essence of any of the things whose appearances we observe. For instance, take our knowledge of bones. They are stiff, articulated at the joints, moved by muscles; they form a frame for the rest of the body; they are cellular in substance; sometimes with a marrow inside, and so on. This is form and function. Go a step further and inquire what is their substance. It is about two-thirds a tribasic calcium phosphate and about one-third gelatin. Go a step further: what are these made of? Gelatin is a proteid substance. It is resolvable into carbon,

hydrogen, oxygen, and nitrogen, with which there may also, perhaps, be a little sulphur and phosphorus. The phosphate is resolvable into calcium phosphate (fifty-seven parts out of sixty-seven), calcium carbonate, calcium fluoride, and magnesium phosphate. These are resolvable into calcium, oxygen, phosphorus, carbon, fluorine, and magnesium. From eight to ten substances, then, go to make up bone. Go a step further still: what are these substances? Here we are at the end of our possibilities, unless it shall turn out some time that they are, in turn, resolvable. Take carbon, for instance, and ask, What is it? *Ans.* It is a solid. *Ques.* So are many other things; but what is carbon in particular? *Ans.* It is an allotropic solid; that is, it exists in three different forms, etc. *Ques.* But that only tells how it appears. *What is it?* *Ans.* It is universally found combining with other substances wherever there is life; with oxygen, for instance, with calcium, etc. It is found in fat and in bone; in plants, etc. *Ques.* But this only tells what it does. *What is it?*

In vain we beat our heads against this limiting wall. Whether carbon itself, or silicon, or oxygen, or phosphorus, or any other so-called element, be an ultimate element, or whether, hereafter, chemists even analyze to the knowledge of one single ultimate universal substance, of which they all consist, there we are or shall be. Forms, properties, appearances of various kinds, we know; but what the substance itself is, we do not, and are no nearer than we were a million ages ago. Close to us, it is frightfully inaccessible to us. A bit of rock-crystal in one’s hand becomes terrible when we apprehend intently enough the immense mystery of its substance. God is there close behind it! If we could really *know* the crystal, we could know God. It is the power of God, steady and visible—a miracle, if ever there was one.

So much for gas and earth. How much more is the essential nature of the soul inaccessible! How infinitely more impossible for us to reach that essence than the essence of a pebble! How infinitely more obligatory to deal exclusively as with appearances, to avoid the assertion or assumption of essential knowledge, if the discussion to follow is to be safe and instructive! The first proposi-

tion of correct mental philosophy must ever be: Of the essence of the mind itself, and of its actual action, human beings are and ever must be perfectly ignorant. And the second proposition is: We can know and examine only the appearances which result from the operations of the mind by means of a material machine, viz., the body, and particularly the brain. Thus clearly distinguishing the sort of research which is not possible and that which is, we can go forward and do whatever can be done.

Keeping this distinction in mind, let us examine a few of President Porter's statements. He says (p. 23): "Psychical phenomena have a definite relation to an agent which is not known to have a single material attribute; which, even when it controls matter, is known by consciousness to be totally unlike any known material agent." The first mentioned "agent" here is the soul. This, he says, controls matter in ways totally unlike those of any known material agent. Now, if we *know* this unlikeness, we *know* those ways of material agents which thus differ. But take, for instance, magnetism. Does President Porter *know* how it "controls matter?" If he does he should not delay to inform the world. But he does not know either how magnetism controls matter or how the soul controls matter. There is, indeed, a very striking similarity, as far as can at present be traced, between the power which magnetism exerts over matter, and that which the soul exerts over matter in moving an arm, for instance. But the two powers are both, in their essence, perfectly inaccessible to us, and President Porter, in asserting either a similarity or a difference, claims a knowledge that no human mind thus far possesses. And in choosing to assert a difference, moreover, he contradicts the facts so far as they are known; for they tend to indicate a similarity.

Again (p. 23): "Matter of itself is inert." On the contrary, all known matter is in motion. We know nothing of the essential nature of matter; but so far as we can judge from phenomena, motion is inseparable from matter, and, therefore, no "inert" matter exists. President Porter's assumption that motion is applied to matter from without may be either untrue or true, but he does not and can not know.

Again (p. 24): "The impression on the eye or the ear has no affinity with or likeness to the perception which follows." In order to make this out, President Porter must know what a perception is. This is impossible. His assertion may not be or may be true, but how is he to observe a perception? As it exists in the soul itself, a "perception" is as inaccessible to our investigations as God is. All we know about it is, that it is a result which so corresponds or answers to the impression on the organ of sense, that the impression is recognizable. This being the case, it is certainly more probable that there is such an "affinity" or "likeness" than not. As before, President Porter is here asserting what, in the nature of the case, can not be certainly known either way, and is selecting that alternative to assert, with which the facts are least in harmony.

Again: the like baseless assumption underlies President Porter's answer to "the inquiry which comes first in order" (p. 40) about the faculties of the soul, viz., "Do we find by consciousness that the soul is endowed with separate faculties or powers?" He answers, No; and on this answer he expressly bases his classification and terminology—that is, his system of the intellect. But neither do we "find by consciousness" that the soul is *not* so endowed. We can not either by "consciousness" or in any way whatever so much as examine the actual structure of the soul. Like the essential substance of the crystal, it is as inaccessible to us as God. And to take for granted one alternative of a question incapable of being determined either way, is thoroughly unsafe, unphilosophical, and misleading.

The appearances which we can observe of the soul's activity, however, contradict President Porter's assertion with a multiplicity and vastness of evidences which it would take a volume to set forth competently. But the exposition would come within something like the following statement:

While the essential nature and structure of the human soul and of its activity are utterly beyond the reach of our investigations, we can observe the means by which it manifests the results of this inscrutable activity. Those means are an organism adapted to the circumstances around it; that is, which af-

fords the soul a vehicle for knowing and acting (but acting, it will be remembered, is no part of President Porter's scheme) toward its fellow-souls, and also toward the unintelligent creation on one hand, and toward the realm of superhuman existences on the other. Now, whether the soul itself be of one kind or another, analogy indicates rather that its vehicle shall afford different instrumentalities for communicating with these three realms of existence and the parts thereof than that it shall afford only one and the same for them all. And facts support the indication.

That paragraph is the outline—the mere mode — of an argument within whose form, however, can be orderly arrayed the whole vast range of discussions to show what man is, what he does, to whom and to what and why he does it. An investigation so conducted, considering man as he actually is, might amount to something. But to attempt what President Porter attempts is to jump down one's own throat to investigate one's inside; it is more impossible, and even if possible would be more useless, than the Asiatic practice of seeking wisdom by the exclusive contemplation of one's own navel. And not only is the whole line of proceeding wrong from the very start, but his method of conducting it, by assuming, whenever convenient, propositions whose affirmative or negative is equally impossible of determination, would vitiate the results of the most correct general plan.

A G A S S I Z .

Up in the lofty halls where science dwells,
God hung a lamp whose light shone far and clear
Into those cells, silent and dim, where men
Of common mold are blind as bats; but this
lamp,

This shining lamp; made daylight there to them;
And plainly now they read the fine, sweet thoughts
Of God Himself, printed o'er the deep-sea
Depths. Too soon 'twas taken hence to light up
Other realms, with its pure rays so heav'nly bright.
'Tis twilight now in those hushed rooms, where
Science,

Weeping her lost glory, sits downcast and sad.

AMELIE V. PETIT.

It is the highest duty, privilege, and pleasure for great men to earn what they possess, and work their own way through life.



NEW YORK,

MAY, 1874.

A REAL GENTLEMAN.

THIS term means one thing in an old country monarchy and something different in the American Democratic Republic. There, where exists a titled aristocracy, a *gentleman* is something less than a lord or a nobleman. Indeed, he becomes "a gentleman usher" to his master, his Royal Highness, or other high personage. But in these United States, where we have no titled Dundrearies, a GENTLEMAN, no matter what his occupation, inheritance, or wealth may be, occupies the top round on our social ladder. With us, he is a gentleman who is intelligent, polite, temperate, well behaved, and a good citizen. It does not matter who was his grandfather or his grandmother. If *he* conducts himself as worthily, he is as good as the best.

It would be claimed, we presume, that there are degrees of excellence among those called gentlemen. One may not have had a liberal education; he may not speak more languages than his own; he may be a farmer, a merchant, an artisan, a mechanic, a preacher, a lawyer, a physician, a teacher, or even an *editor*, and be a gentleman; so may a city alderman, a legislator, or even a member of Congress! In these latter cases his right to the appellation of gentleman would depend on his integrity and what degree of temptation to corruption he can withstand.

One may have the outward semblance of a gentleman, while at heart he may be a vile counterfeit. We meet with persons who have been well educated, and who dress in a becoming manner who, by perversion and bad habits, have lost all claim to the title of gentleman. For example, Mr. A. comes of a

good family, is a graduate of Harvard or of Yale; speaks three or four languages; married the daughter of an ex-governor; has held office under several different administrations; is quite a politician, a fluent speaker, a racy writer, and has all the elements of a gentleman save one—he *lacks sobriety*; has become a drunkard, and, therefore, is *not* a gentleman. Still, he claims this honored title, and tries to keep up appearances. But how self-deceived he is! He does not realize that, being saturated with whisky and tobacco, he smells worse than a skunk. His breath, his clothing, his whole personal atmosphere, are enough to sicken a dog. But, nevertheless, he struts around in his shabby-genteel attire, entertaining bar-room loafers, telling bawdy stories, singing smutty or bacchanalian songs; or he patronizes the gaming table, seeking to pluck unsophisticated young men who may fall in his way, or are entrapped, as the spider entraps the fly. Is he not a gentleman? Go East, go West, go North, go South, and you will meet this sort of creature at every turn. Such live by their wits, not by honest industry, and they go down, down, down, beyond the hope of social or moral resurrection.

Our idea of a real gentleman is this: He is intelligent, courteous, polite, temperate, kindly, just, charitable, respectful, mindful of others, self-controlling, and self-denying. He is clean in his personal habits, uses no obscene, profane, or vulgar language; dresses, not like a dandy or a fop, but according to good taste and common sense; neither chews, nor snuffs, nor smokes tobacco, and does not drink alcoholic liquors of any sort." He is above a mean thing. He can not stoop to a mean fraud. He invades no secret in the keeping of another. He betrays no secret confided to his keeping. He never boasts nor struts about in borrowed plumage. He never takes selfish advantages of our mistakes. He uses no ignoble weapons in controversy. He never stabs in the dark. He is ashamed of innuendoes. He is not one thing to a man's face and another behind his back. If by accident he comes in possession of his neighbor's councils, he passes upon them an act of instant oblivion. He bears sealed packages without tampering with the wax. Papers not meant for his eyes, whether they flutter

at the windows or lie open before them in unguarded exposure, are sacred to him. He invades no privacy of others, however the sentry sleeps. Bolts and bars, locks and keys, hedges and pickets, bonds and securities, police and prisons, notices to trespassers, are none of them for him. He may be trusted alone out of sight, near the thinnest partition—anywhere. He buys no offices, he sells none, he intrigues for none. He would rather fail of his rights than win them through dishonor. He will eat honest bread. He tramples on no one's feelings carelessly. He insults no man. If he have rebuke for another, he is straightforward, open, manly; he can not descend to scurrility." In short, whatever he judges honorable he practices toward every man.

Ambition and emulation have a selfish root. Aspiration for improvement and usefulness is laudable. He is the best gentleman who is the least selfish, and who has the fewest faults and the most graces. As a rule, though a gentleman can not be pretty, he may be noble, and in its best sense handsome or beautiful and grand. His actions will be gentle; his expression attractive, and the whole aspect of the person will be impressive. He who is clean, temperate, healthy, intelligent, manly, and strives to "DO AS HE WOULD BE DONE BY," will not come far short of realizing our idea of a REAL GENTLEMAN.

A NATIONAL TEMPERANCE COMMISSION.

THE friends of temperance have petitioned the United States Senate and House of Representatives to organize a Commission of Inquiry, to inquire and take testimony as to the results of the traffic in alcoholic liquors in its connection with crime, pauperism, the public health, the moral, social, and intellectual well-being of the people, and as to the prohibitory legislation of certain States—and which shall also recommend what additional legislation, if any, should be inaugurated by Congress for the suppression of the traffic in alcoholic liquors as beverages. In response to this petition, a bill has been introduced into Congress providing for the appointment of five commissioners taken from civil life, to hold office for one year or until their duties shall have

been accomplished, and to serve without salary, who shall investigate the alcoholic liquor traffic in its economic, criminal, moral, and scientific aspects, in connection with pauperism, crime, social vice, the public health, and the general welfare of the people; and who shall also inquire and take testimony as to the practical results of licensing, and of restrictive and prohibitory legislation for the prevention of intemperance in the several States. The bill further provides for the employment of a secretary by the commission, at a reasonable compensation, and that the necessary expenses incidental to the investigation shall be defrayed by Congress.

While there may be doubts in the minds of many as to the constitutional power of Congress to interfere by legislation for the regulation or suppression of the traffic in intoxicating liquors in the several States, there can be no doubt that great good would result from an exhaustive investigation of the various subjects proposed in this bill by a competent and inexpensive commission. By no other method could so large an amount of valuable information be collected, in a reasonably brief space of time, as by such a commission, if empowered to take, and, if need be, to compel, testimony upon the physiological, social, economic, sanitary, criminal, and other particulars involved in the inquiry. The results of such an investigation, as embodying a large fund of precise and otherwise inaccessible statistics and facts, would be a most useful contribution to an important branch of knowledge.

That no unfriendliness may be excited on the part of those who deny the power of Congress to interfere with the traffic in liquors within the several States, the friends of temperance explicitly declare that they do not ask any special or technical legislation. Their principal aim is to make a thorough, impartial, and comprehensive collection of facts, and to suggest only such legislation as these may show to be desirable, necessary, and strictly within the ascertained powers of the national legislature. They do not conceal, however, that they shall strive to induce Congress to take immediate action on the subject in the District of Columbia, in the territories, with the Indians, and wherever else the authority of Congress extends.

When all the facts are in, legislators will have something on which to act, and if it shall appear, on the best evidence, that whiskey-drinking is a good thing, then let us all share in its benefits. On the other hand, if it shall be made to appear that it is an unmitigated curse to the race, then let us put a stop to its use. What, by legislation? can you legislate on what we may eat and drink? Aye, verily. We *do* so legislate, and it is unlawful for a butcher or marketman to sell stinking or diseased flesh for human food. A druggist may not sell certain kinds of poisons without labelling them, nor except on certain specified conditions. These and other things are regulated by law—why not alcoholic liquors? We shall come to this ere long, and ultimately drive alcohol, opium, and tobacco out of general use, to the great gain of human health, human life, and human happiness. We ask, nay, demand, the proposed Commission.

THE RIGHT MAN FOR THE PLACE.

THE N. Y. *Sun* says: "It is not very long since the news of the shipwreck of the Atlantic in mid-winter, on the rock-bound coast of Nova Scotia, startled the public heart. All were moved at the thought of the enormous sacrifice of human life—several hundred perished;—and quite as much, though differently, in view of the modest heroism of two relatively humble men, the mate who carried the line ashore and saved so many, and the poor clergyman, the Rev. Mr. Ancient, whose parish was in that harsh neighborhood, who manned a boat, and, in the height of the tempest, at the risk of his own life, went to successful rescue.

"There was something so striking in this clerical exploit, so unlike the professional demeanor we are accustomed to, that a good deal of rather spasmodic sympathy was aroused, and an effort was made here in New York and elsewhere to tender to this poor and heroic clergyman an adequate testimonial. Something was done; but it did not amount to much, and the Rev. Mr. Ancient—unlike Grace Darling, who is embalmed in poetry and visible in print-shops—passed away into the dim region of forgotten heroes. So with the mate, except that he was forgotten sooner. No one thought of doing anything for the poor

sailor. He was only a third mate, and his name was Brady!

"We do not know if the owners of the line ever recognized his services. We should infer not, from the fact that we find him now returning to America a steerage passenger, cooking his own food, on board one of the Philadelphia steamers. There is no doubt about this, for we are told that, as we regret to say is often the case, there was but one cabin passenger, and he was not Brady. Then, in mid-ocean, came the mid-winter hurricane, and in the darkest hour of a February night the great surf swept the decks, and away to a wild death, the captain and his two chief officers, leaving the command to a third, who skulked below [a timid, white-livered coward]. But there was one brave and competent man on board that apparently doomed craft. Brady, the Atlantic's mate, crept from his steerage bunk, and, with the acquiescence of all, took the command, saved the ship, and brought her safely to Philadelphia.

"It was a deed worthy of all praise everywhere. It calls for a special acknowledgment from the City of Brotherly Love. What form, if any, it will take, it is not for us to conjecture." [It has since taken the form of a vote of thanks, and a cheque for \$1,000.]

We refer to this case for the purpose of calling attention to the difference in the character in persons. This man, Brady, though poor—and probably uneducated, save in navigation, which is his calling—has real bravery, together with a quick and practical intellect, while the one whose duty it was to take charge of the ship, in that emergency, was, in character, courage, and capacity, what the North American Indian calls—the term of utmost reproach for a man who lacks bravery—a miserable "squaw." Think of the third officer in command, when captain and mate had been swept into the sea, slinking off into his bunk, leaving the ship a prey to the waves. The miserable poltroon! He is useless to himself, and a nuisance to the world.

[Since the above was written, the owners of the steamer offered Brady the captaincy of the ship, which he declined, and, we presume, under advice of attorneys, who seek "fees," has commenced a suit against the company for salvage, succeeding in which will give him a large sum of money. In the eye of civil law, this may be his due, but is it according to that higher law which teaches us to "do as we would be done by?" Lawyers, and not Brady, should be credited with this proceeding.]

PHRENOLOGY AND OLD STYLE METAPHYSICS.

IN another part of the JOURNAL the reader will find a criticism of an eminent thinker's published views of Phrenology and the nature of mind. In this place it is not inopportune to state briefly that the difference between the phrenological method of investigation and that of the old metaphysicians is precisely this: that the latter followed consciousness as a guide to mental investigation, while the former observed facts in the character of men and studied organization afterward. The following pertinent extract from "Combe's System of Phrenology" will show how Dr. Gall discovered faculties first and organs afterward:

"Dr. Gall was acquainted in Vienna with a prelate, a man of excellent sense and considerable intellect. Some persons had an aversion toward him because, through fear of compromising himself, he infused into his discourses interminable reflections, and delivered them with unsupportable slowness. When any one began a conversation with him, it was very difficult to bring it to a conclusion. He paused continually in the middle of his sentences and repeated the beginning of them two or three times before proceeding farther. A thousand times he pushed the patience of Dr. Gall to extremity. He never happened by any accident to give way to the natural flow of his ideas, but recurred a hundred times to what he had already said, consulting with himself whether he could not amend it in some point. His manner of acting was in conformity with his manner of speaking. He prepared with infinite precautions for the most insignificant undertakings. He subjected every connection to the most rigorous examination and calculation before forming it.

"This case, however, was not by itself sufficient to arrest the attention of Dr. Gall; but this prelate happened to be connected in public affairs with a counselor of the regency, whose eternal irresolution had procured for him the nickname of *Cacadubio*. At the examination of the public schools these two individuals were placed side by side, and Dr. Gall sat in the seat immediately behind them. This arrangement afforded him an excellent opportunity of observing their heads. That which most forcibly arrested his attention was, that both their heads were very broad at the upper, lateral, and hind parts, the situation of the organ since called Cautiousness. The dispositions and intellectual qualities of these two

men were, in other respects, very different; but they resembled each other in circumspection, and also in this particular development of head. The coincidence between them in this point suggested the idea to Dr. Gall that irresolution, indecision, and circumspection might be connected with certain parts of the brain. Subsequent reflections on this disposition, and observation of additional facts, converted the presumption into certainty.

"It is a principle of Phrenology, that absence of one quality never confers another. Every feeling is something positive in itself, and is not a mere negation of a different emotion. Fear, then, is a positive sentiment, and not the mere want of courage; and it appears to me that the faculty now under consideration produces that feeling. The tendency of the sentiment is to make the individual apprehend danger; and this leads him to hesitate before he acts, and to look to consequences that he may be assured of his safety. Dr. Spurzheim names it 'Cautiousness,' which appellation I retain as sufficiently expressive, although the primitive feeling appears, on a rigid analysis, to be simply fear."

It would seem as if writers who criticise Phrenology had not read any of the standard works. Presidents and professors in colleges should at least be tolerably well informed on subjects before they volunteer statements which are so easily refuted.

HOW IT IS DONE.

THE following extracts from a letter recently received, and the reply annexed, will carry their own explanation:

"Editor PHRENOLOGICAL JOURNAL—*Dear Sir*: I wrote you two or three months ago in regard to the study of Phrenology, and am obliged for the satisfactory answer which you sent me. I have just received from you a pamphlet, entitled, 'Professional Instruction in Practical Phrenology,' which has revived the subject in my mind; consequently this letter. I desire to know something further in regard to your course of instruction, for I should like very much to be a member of your next class. I am particularly anxious to become a first-rate examiner and lecturer, and do not wish to be one at all if I can not be a good one—don't want any 'alf-and-alf.' The circular says that 'seventy-five, or more, private lessons will be given, at the rate of two per day.' Does this constitute your whole

course, and what are your modes of procedure in giving instruction? I should be pleased to hear from you at your convenience.

"H. J. H."

REPLY.—"H. J. H.": You ask for further information respecting our course of instruction. We had supposed the circular would make that very plain, though the topics therein referred to are very much condensed, and not extendedly explained, designed to show rather the essence than to indicate the minute extensiveness of the teaching. Imagine yourself one of a class, say of twenty-five persons, seated in a semi-circle, with a large table before you covered with skulls and casts of heads of men and animals; around the room portraits of the most noted personages, ranging all the way from the best of men to the worst of criminals, together with anatomical and physiological specimens, including plates and drawings illustrating the whole human economy, bodily and mentally, and you will have an idea of the exterior facilities for acquiring a knowledge of the subjects which have called the class together. The teacher occupies the space between the table and the class, and for an hour and a half, or two hours, treats the specific topic before the students in a conversational and familiar style. The pupils have books, in which they take copious notes, and in which they indicate any topic in respect to which they wish to ask questions. During the recess the students can in another book write up carefully and extend their notes so as to have before them a complete skeleton of all that has been done or explained during the session. At eleven o'clock in the morning the class adjourns until two, and at the close of that session adjourns until half-past six. The first week or so one lecture during each evening is as much as the students can well bear, till they get their brains working in harmony with the subject, and their change from home to city life has been easily effected; the second week we give two lectures a day, the third week three, and sometimes interject a lesson on elocution, or a discussion by the class, so as to vary the topics as much as may be, and thereby bring into use the various mental faculties, and thus relaxing the strain, the students have sessions of their own, at which various points are talked up. If, on some points, some are in the dark, others will be able to explain, and thus they live over their instruction in their own sessions. Some meetings of the class are devoted to reviews, each student being requested to tell what he can

about some topic which has been the subject of a previous lesson; he is allowed five minutes to recall and express what he can. The next student, perhaps sitting the fourth from the first, is invited to take up the subject, and add what the other neglected to say; and so it passes around. If anything remains unsaid, or was stated wrongly, the teacher adds or corrects it, as may be required. Other sessions are devoted to the asking of questions by the pupils, and all doubtful or knotty points are thus canvassed and discussed.

Another session is devoted to the practical examination of the heads of persons invited to attend the class for that purpose, and thus, by practice, under careful direction, the pupil becomes familiar with the subject, both in a theoretical and practical way. Another session will be devoted to physiology, illustrated by skeletons and plates the size of life, showing all the parts of the human system in position, and by special parts magnified. These are minutely explained to the class by experts in anatomy and physiology. The brains of men and animals are dissected and explained to the students, and all its parts and peculiar structure compared with plates which are hung up in the room for constant inspection. The skulls of animals, ranging from the great polar bear to that of the weasel, and from the eagle to the humming-bird, are exhibited and described to the class. The specimens, of whatever kind, are passed around and carefully explained to each student while holding the article in his own hand.

The objections which are sometimes raised against Phrenology are carefully examined, and, as we think, properly explained, and thoroughly set aside, thus preparing the student to vindicate his subject anywhere and always. A series of lessons are given on elocution, by those who make it their profession, in which the right use of the voice and its proper method of training are brought out distinctly. Extended instructions are also given as to personal health, and most students lay aside whatever bad habits they may have before the course of instruction is over; and the true way how to teach mankind to cultivate and train the young to health, usefulness, morality, and happiness, is fully and plainly set forth. The class of 1873 received eighty-seven lessons in addition to all the training and practice which they acquired in their own meetings with the apparatus before them for careful inspection and examination. Any student who has paid the tuition and attended

one entire course, can take a second course (if at any time he may choose to do so) on the payment of the small sum of ten dollars. This course of instruction is designed to be very thorough in respect to theoretical and practical Phrenology. The more a student may know of general physiology, and the more he may have read upon the subjects of Phrenology, Physiognomy, and Psychology, before he comes, the better. We bring under contribution every bust and skull, every cast and portrait in our large collection, and aim to make each student as thoroughly acquainted with all that we have learned during the last thirty-five years as plain language and practical illustration, inspired by earnestness of purpose, can possibly communicate.

FREE CHURCHES.

THERE are a few reformatory clergymen in New York who are engaged in agitating the question of FREE CHURCHES—or Churches with FREE SEATS—churches in which rich and poor may meet on equal footing, and worship God. This new movement contemplates more frequent services than is customary at present, furnishing accommodations to all who care to attend. These clerical gentlemen are opposed to what are called mission chapels, which rich churches establish for the poor; and, instead, would have the poorest as well provided with religious privileges as the richest.

We like the plan. Should it be adopted and become general, each may contribute little or much, as he pleases, and each feel "at home" in any and every church where he may happen to be. At present, where the seats are owned, the *best* by the *richest*, and the poorest by those less fortunate, class distinctions are made which seem contrary to the spirit of true Christianity. Good men may be found on both sides of the question, and it may be some time before we shall have free churches; but, if the right spirit prevails, they must, sooner or later, take the places of churches which are *not* free.

The ball has been set in motion, and we shall be glad to see it roll through the length and breadth of the nation. Let the cry be a free church for a free people in a free country. Let there be no attempted union between church and state, but at all times a proper recognition of the Divine in legislation. Are we not a Democratic Republic? Are we not Christian? Then why not free churches?

Department of Literature, Science, Education.

LIFE IN THE DEEP SEA.

WHO loves not the sea? Who is so dull that, as he stands on the shore, and looks out over the broad expanse, is not filled with feelings of wonder and admiration, with deep and stirring emotions? Great ocean, thou emblem of eternity, symbol of the Infinite, with a reverential awe we contemplate thy mysteries, and delight to behold thy beauty. Ever restless, never tiring, thou hast rolled and tossed since time began, and over thy deep bosom—before the morning stars sang their first song—came the low, distant wail of the wind, and down through the ages ever and anon thy tides have ebbed and flowed. Thou art the mother of the continents, and the islands thy children.

Yet amid all these reflections, reader, have you ever sought to break the seal that binds this casket of mystery? To wend your way into this labyrinth of God? And longed to behold the beauties of the depths of this world of wonders, a thousand fathoms below? Has it ever occurred to you that beneath these waves is a world like ours, with an atmosphere in which swim strange fishes—the birds of the ocean—and over whose beds crawl strange monsters? Until recently, the sea, beyond a few fathoms in depth, was enveloped in obscurity. It was a *terra incognita*, supposed by naturalists to be barren of life-forms. In it they fixed a zero of existence beyond which was utter lifelessness. For, reasoned they, the pressure of the great mass of waters toward the center, must be too great to admit of the presence of animate beings; but we should not be too quick to establish the limits of life-possibilities, for we are unable to say at what extremes of condition living forms in some shape may not exist. It is to this we ask your attention.

Go with us, in imagination, to the ocean's bed, and there, by the aid of the results of recent researches, traverse this rich and delightful field—so full of mysteries, so pregnant with the unknown—and glean what of truth we may. But before we enter upon our

subject proper, let us take a cursory glimpse at the physical geography of the ocean.

Nearly three-fourths, or, more accurately, eight-elevenths of the earth's surface is depressed and submerged in salt water, and more than three-fourths of this oceanic basin is situated in the Southern hemisphere. Around the North Pole are clustered the continents which stretch southward in two great areas, the Oriental and the Occidental; the former including Europe, Asia, Africa, and Australasia; the latter North and South America. Around the South Pole cluster the waters which extend northward in two masses, the Atlantic and Pacific oceans separating the Orient from the Occident, and the Indian, which separates the southern prolongations of the Orient (Africa and Australasia). The depth of the ocean in some parts may reach 8,000 fathoms, but the mean depth falls far below this. That area extending from Newfoundland to the coast of Ireland, called the telegraphic plateau, is from 10,000 to 15,000 feet below the surface. Farther south, the Atlantic is much deeper. Often, for a considerable distance, the continents extend into the sea with but a slight incline, after which they take a sudden slope to the bed of the ocean. Thus the sea is fringed by a shallow border off the east coast of the United States. South of New England this is the case. Off New Jersey this plain extends about 80 miles from the shore, and off Virginia, from 50 to 60. The fall of the bottom for 80 miles off the New Jersey shore is only one foot in 700 feet. Thus we fix the true oceanic boundary, and the line of the continents at the abrupt slope. The continental plateaus are separated from the ocean by an elevated border, which is always great in proportion to the extent of the ocean; for example, the Pacific exceeds the Atlantic, hence, the western border has the Rocky Mountains, while the Atlantic is separated from the continent by the Appalachian range; and, as the South Pacific exceeds the North

Pacific, so do the Andes of South America exceed the Rocky Mountains. With this we will not occupy more time, for the reader can readily learn the truth of the statement by a glimpse at the geography of the earth.

SEA LIFE.

One of the strong arguments used to establish the theory of a zero of existence, was that animal life depends solely upon the vegetable for its subsistence, the latter alone being able to extract and assimilate the elements of nutrition, and adapt them to the wants of life; hence, at depths beyond which vegetation could not exist for want of light, etc., we could not look for the existence of the other kingdom. That this conclusion was false has been proven. The question arose: "How do these deep-sea beings exist amid the absence of vegetable growth?" To this, various solutions have been advanced; but the one which we deem most tenable is as follows: The waters of the ocean are surcharged with vegetable matter, and hold in solution the remains of animals which require the exercise of no chemical or assimilative power, but may be readily absorbed as food by the denizens of the deep, as they separate the carbonate of lime from the water, and apply it to the wants of their economy. This we deem ample to cover the ground, and answer the question of the source of food for the creatures in deep waters.

'Tis an inspiring thought to the ambition of the naturalist, that by the researches of recent marine explorers, a comparatively new field, the bed of the sea, with area of 140,000,000 of square miles, has been opened to his observation. A field, too, not sparsely inhabited, but rich in variety and beauty of animal organisms. Over it are strewn beings beautiful and delicate, radiant in rainbow hues, shining in phosphorescent light, huge monsters, strange and voracious, stalk abroad. And no doubt there is a busy scene of life amid and beneath that watery atmosphere, undreamed of by the most sanguine.

The late Professor Forbes—who was the pioneer of marine zoology—tells us that every species has three maxima of development: in depth, in geographic space, in time. In depth we find a species, at first represented by few individuals, which become more and more numerous, until they reach a certain

point, after which they gradually diminish, and, at length, totally disappear. So, also, in the geographic and geologic distribution of animals. He noted around the sea-coast four zones of life, each characterized by a distinct group. The first is the littoral, the space between the tide marks characterized by sea-weeds. The number of animal species is not great, but the individuals are numerous. Many of the former may be said to be cosmopolitan, so wide is their distribution. They are chiefly vegetable feeders. The laminarian zone extends from low tide to a depth of fifteen fathoms. In this the vegetable are chiefly tangles, and animals are abundant, both in species and individuals, among which are many specimens of great beauty, remarkable for the brightness of their hues.

Next comes the coralline zone, which reaches downward about fifty fathoms. To this belongs the fishing banks, frequented by the cod, halibut, and turbot. This is also the home of the prominent marine invertebrates, mostly the carnivora. The last zone discovered by Forbes is that of the deep-sea corals, which extends from the border of the preceding down into the unknown depths, and he erroneously says: "As we descend deeper and deeper in this region, its inhabitants become more and more modified, and fewer and fewer, indicating our approach toward an abyss where life is either extinguished, or exhibits but a few sparks to mark its lingering presence." Huxley gives us the result of more recent research, and informs us that there are five zones, characterized each by peculiar vegetable and animal forms. They are: First, the littoral, comprising the interval between high and low water-marks; second, the circumlittoral, which extends to the lowest limit of the coral-like plant (the nullipora), that being in our latitude at a depth of fifteen or twenty fathoms; third, the median, characterized by the abundance of polyzoa and sertularidæ, and by the prominent molluscus carnivora. It extends in our seas about fifty fathoms; fourth, the inframedian; and fifth, the abyssal, comprise the regions below, of which we can not definitely speak, although to the dredging expeditions of the last few years we owe many new and striking facts concerning this interesting and, heretofore, obscure subject. Be-

fore we advance, it may be well to notice some of the data which led naturalists to a change of views concerning the existence of animals at a great depth. Gen. Sabine, who accompanied Sir John Ross, in 1818, on an expedition of discovery in Baffin's Bay, gives the following particulars: "The ship sounded in 1,000 fathoms mud, between one and two miles off shore (lat. $73^{\circ} 37'$ N. long. $77^{\circ} 25'$ W.) A magnificent asterias—*caput medusæ*—was entangled by the line, and brought up with very little damage. The mud was soft and greenish, and contained specimens of *lumbricus tubicola*." In 1839–43, Captain Sir James Clark Ross dredged in 270 fathoms, and in 1875, Henry Goodsir, in Davis Strait, in 300 fathoms, and brought up many specimens mixed with green mud. But these were uncertain lights, and the question was still asked: "Do these organisms exist at the depths to which the soundings reached? or did these specimens come from a shallower region, they adhering to the dredge on its passage upward? At last these doubts are dispelled, and the glowing truth, that living organisms do exist, even at extreme depths, has become apparent through the efforts of Mr. Fleming Jenkins, who, when in the employ of the Mediterranean Telegraph Company, discovered the caryophyllia—a true coral—clinging to the cable, by a natural attachment, at the depth of 1,200 fathoms. Milne Edwards gives a list of animals amounting to eight or ten species, which he found on this cable at 1,100 fathoms.

Thus the vexed question of a zero of life is solved, the longings and doubts of naturalists vanish, and a new world of life and beauty is opened, a field rich in wonders is made accessible to the student. We now proceed to notice, first, the conditions that regulate life in the deep-sea. These are pressure, temperature, and the absence of light, which would preclude vegetable growth. The average depth of the sea is 2,000 fathoms—about two miles—a distance below the surface equal to the elevation of the average summits of the Alps of Switzerland. Many depressions exist which extend far below 2,000 fathoms, but these are merely local. At first sight, the effects of pressure which must follow at so great a depth would seem to be a barrier to the possibilities of life, but

when we consider that while a man at 200 fathoms would sustain a pressure equal to that of many tons, water is almost incompressible, and, at great depth, the increase of density is well-nigh inappreciable. According to Jamin, at the depth of one mile, sea-water under 159 atmospheres of pressure is compressed by 1-144 of its bulk, and at twenty miles, supposing the ratio to continue the same, by only 1-7 of its volume, or, in other words, at that depth the water is 6-7 of the volume of that at the surface. The fact that the animals of the sea have in their tissues fluids well-nigh incompressible, and the principle that the body of a man will bear great atmospheric pressure on its area, afford evidence of the possible existence of life at extreme depths. Professor Sars gives a list of animals of the invertebrata, living at 300 or 400 fathoms, hence subjected to 1,120 pounds pressure to the square inch. Shark fisheries are carried on beyond that depth, in which we have an example of an animal, high in the scale of organization, not only existing, but flourishing in great swarms where the pressure is over one-half a ton to the square inch. It is not probable that high organizations would exist in such extreme conditions if suddenly brought under them, and it is only by gradual adaptation to them that they cease to be a barrier to life of this class. Nor, on the other hand, could they survive a sudden removal of the pressure when this adaptation is complete; in illustration of which fact we observe that many of the molluscæ and sharks brought up from great depths are dead, or sluggish and inactive, when they arrive at the surface.

TEMPERATURE.

The researches of the ship *Lightning* have exploded the old idea of a permanent deep layer of water, whose temperature is 4°C , and render it evident that the average temperature of the deep-sea bed in temperate and tropical regions is about 0°C , the freezing point of fresh water. It also established the existence of a general surface movement of warm water from the equator toward the poles, the result of a combination of causes, also a slow under-current of cold water from the poles. Owing to the conformation of the continents, these regular currents are in some places disturbed, and we find in certain local-

ities circumscribed cold and warm currents producing the phenomenon of a mass of cold and warm water meeting and uniting in a definite line. Along the coast of Massachusetts is an example of this, the "cold wall," which forms the western boundary of the Gulf Stream. Doubtless temperature is the great regulator of the geographical distribution of the animals of the sea, little if any influence being exerted by the nature or conformation of the bed, for we find in the shallow zones species living in all kinds of sediment, and coasts of various physical aspects. Living in an element which favors transportation, and many of the species so delicate of structure as to be carried along by a slight current, yet we find their geographical limits are well defined. Forbes pointed out an inverted analogy existing between sea and land faunæ and flora. For example, the land at the level of the sea has a prolific faunæ and a corresponding flora, but as we ascend the side of a mountain, we find both to grow sparse, according as the conditions grow extreme; one after another the species of the plain disappear, and those that we behold approach nearer and nearer, as we rise, to those belonging in the northern regions. Likewise in the ocean, there is a general shore line of luxurious vegetation and animal forms, deriving their character from the climate in which they live, but as we descend, a gradual change is perceptible, the type of the faunæ and flora being modified with the increase of the rigor of the conditions, until they reach a zone where alterations of temperature are unfelt, where inferiority of type becomes marked, and the species are distributed over a wider area, resembling the shallow water growths of northern regions.

As yet, our knowledge of the distribution of the abyssal species is imperfect, but from known facts, and reasoning from analogy, we are unable to arrive at the general laws which regulate it. The third condition, the absence of light, does not appear so formidable an obstacle to animal development since the solution of the problem of their existence in regions where vegetation does not grow. We are unable to say to what depth the sun's rays penetrate the water of the sea; however, from experiments we learn that they cease to act upon a photographic surface at a few fathoms. We can freely assert that below fifty fathoms there is an absence of vegetation from want of light, hence, as we intimated before, the faunæ of the deeper zones derive the vegetable matter necessary to their subsistence from that held in suspension by the waters in which they move. Of the deep-sea animals it may be said, that while they bear upon them the marks of the extreme conditions under which they exist, while they are fewer and more uniform in type, they are not more degraded in organization.

One conclusion to which we are led by observations of submarine life is, that the variety of species is not due to specific creations, but the result of departures from a single center, the legitimate consequence of the operation of physical causes. Of this new and unknown land, upon the borders of which we have but just arrived, we can say but little, and that we as yet should have attained to anything approximating a correct knowledge of the subject could not be expected; but in view of the vastness of the field, we are encouraged by what has been accomplished to continue to seek for more light upon this obscure subject. ULYSSES L. HUYETTE, M.D.

SIR BARTLE FRERE.

THE activity of interest in African affairs shown by Great Britain during the past two or three years, has drawn the attention of the scientist, the political economist, and of the philanthropist to that most benighted of the world's great continents. A few months back we had occasion to mention the worthy part undertaken by the British government for the suppression of the slave trade on the East coast of Africa. Now it is convenient for us

to consider particularly the gentleman who was selected to negotiate with the African government, under whose protection or tolerance the nefarious traffic was carried on.

Sir Henry Bartle Frere, a descendant of an old Norfolk family, was born at Llanelly, in the county of Brecon, on the 29th March, 1815. At the age of twelve he was sent to a grammar-school at Bath, and thence to Haileybury College. As a scholar, young Frere exhibited

much diligence and proficiency, securing honorable premiums in several departments of study at both places. From Haileybury he went into the Indian Civil Service, obtaining an appointment to the Bombay presidency in 1834. He made the then difficult journey to India, partly by steamer and partly by land, experiencing much hardship on the way from Cairo to Surat, which he accomplished overland. Within three months after his arrival he passed successfully an examination in Hindustani, and afterward acquired a practical knowledge of the Mahratta and Guzerat lan-

the second daughter of the governor, and a year later made a visit to his native land. On returning to India he was appointed to the important post of resident at Sattara, and subsequently commissioner. There he improved the revenue system, and built the first tunnel in India. On the conquest of Scinde, by General Napier, that distinguished soldier was made its governor, and Mr. Frere became the commissioner in 1850. During Mr. Frere's administration, about 6,000 miles of roads were opened, and the "Supply channel" was constructed to furnish water to a network of canals



guages. The governor of Bombay gave him a post in Poona, the ancient capital of the Peshwas. There he found much in the customs of the people to interest his thoughtful mind. In fine, he made himself so familiar with the habits of the natives that in most of the government measures for the inspection and assessment of the Bombay presidency, Mr. Frere was employed as an assistant.

In 1842 Sir George Arthur was appointed governor of Bombay. His private secretary having died on the passage out, Mr. Frere was appointed to the vacancy. In 1844 he married

extending 300 miles from the point where it leaves the Indus. The construction of the Scinde railway, and the improvement of the harbor of Kurrachee, were mainly due to his efforts.

In 1856 he again visited England to restore his broken health, and returned to the post of duty the following year. He was scarcely in his place when the revolt at Mecrut began, and without waiting for instructions from Bombay, Mr. Frere sent one, the best, of the only two regiments to Mooltan, the key of the Punjaub; for he saw that the fate of India de-

pendent on the attitude of the Punjaub, and dispatched a steamer to divert to Calcutta some troops that were returning to Scinde from the Persian Gulf. During the worst days of the celebrated mutiny, Mooltan and Feroz-pore were held by the troops sent by Mr. Frere. For his prompt, unselfish action in a great and terrible emergency, he received the thanks of both Houses of Parliament in 1858, and again in 1859, when he was nominated a K.C.B., and appointed a member of Lord Canning's council at Calcutta.

In this new position, Sir Bartle Frere exhibited his admirable administrative ability. He proved the friend and right-hand man of Lord Canning, and when that gentleman retired from the government, in 1862, he acted as President of the council until the arrival of Lord Elgin. Shortly afterward Sir Bartle was appointed governor of Bombay, and for five years performed the arduous duties of that high office, besides originating and earnestly promoting many enterprises for the improvement of the city of Bombay and of the native people. He accomplished much for the cause of female education, in which he was warmly aided by his wife.

In 1867 he retired from Indian service, and returned to England. He has not been idle since that time, being a member of the Indian

Council, and an active member of the Royal Geographical Society. He has published a volume of essays, entitled, "The Church and the Age," a work devoted to Indian missions. Last year, as is well known, he was appointed special commissioner to Africa, to negotiate a treaty with the Sultan of Zanzibar for the suppression of the slave trade. His Bombay experiences had well fitted him for the work, and the manner of its execution confirms the wisdom of the appointment.

As a man, Sir Bartle Frere possesses a fine development of the mental temperament. That large and symmetrical cerebrum indicates high culture and native refinement. He is a rapid thinker and a quick organizer. The broad range of the forehead shows clear and comprehensive discernment—he takes in the "situation" at a glance—and the full side-head shows superior capacity in arranging, planning, and applying materials and instrumentalities to secure certain ends. He is a natural engineer. His moral organs are well developed, particularly Benevolence and Faith—so that he is at once considerate for the happiness of others, and possessed of strong religious convictions. While evidently a methodical and precise man, he can not be deemed exacting or severe, although disposed to expect others to meet their obligations fully.

"ITS," AND SOMEWHAT ABOUT IT.

THE modern possessive form of the impersonal pronoun, as it stands in our heading, has played an important rôle in literary and philological circles. A modern Englishman would find himself at almost a conversational stand-still if deprived of its use; while one of the Elizabethan era would find himself as much at a dead-center in its conversational employment.

The first marked attention given to this form of the word was in the time of Chatterton (1752–70). Here it served on detective duty, and in this way exposed the literary frauds of that lamented genius. To recall the circumstances briefly: Chatterton, for the sake of what notoriety they might bring, had been writing odes in the olden English dialect, and had fathered them upon an old monk named Rowley. So nicely were his manuscripts executed that they deceived the brilliant Walpole, to whom they had been submitted; but when he (Sir Horace) presented them to the critical

Gray and Mason, their fraudulency was detected, the frequent use of this little word "*its*," being one of the strongest points developed against the authenticity of the manuscripts.

To show with what rarity the word, in this form, occurs, I need but mention that it is found but *once* in the Bible, and even here it is a mistake of the printer or proof-reader. This passage is found in Lev. xxv. 5, and reads: "That which groweth of *its* own accord;" the original and authentic copies reading, the same passage, "That which groweth of *it* own accord." In Shakspeare we find this same undeveloped form of a possessive (without the proper possessive ending) quite frequently; and it is also in frequent use among most of the older writers. For instance, Shakspeare says: "Go to *it* grandam, child, and *it* grandam will give *it* a plum." And again: "The innocent milk in *it* most innocent mouth." At the present day the yeomanry of the midland and

northern counties of England still make use of this non-inflected form in their provincial conversations.

Although this is the more common form in many of our older English authors, the translators of the Bible have used "his" in the places where "its" would sound smoother to our ears. For instance, in speaking of the altar, we find (Ex. xxvii. 3) this passage: "And thou shalt make *his* pans to receive *his* ashes, and *his* shovels, and *his* basins, and *his* flesh-hooks, and *his* fire-pans: all the vessels thereof thou shalt make of brass."

In Shakspeare I have found "its" to occur but twice—save when compounded with the reflexive "self." The first place is in "Hamlet," Act I., Scene 2, where Horatio is telling Hamlet of the Ghost. I wish to call special attention to the Italics, as there is a transfer of gender (from neuter to masculine) in the mouth of Horatio, and upon which a false theory of the origin of our "its" has been promulgated. The passage reads:

Hor.—Thrice he walk'd
By their oppress'd and fear-surprised eyes,
Within *his* truncheon's length.
* * * * *

Ham.—Did you speak to *it*?

Hor.—My lord, I did,
But answer made *it* none; yet once, methought,
It lifted up *its* head and did address
Itself to motion, like as *it* would speak.

The second time I find it in "King Henry IV.," Part II., Scene 2, the passage reading:

Ch. Justice—There is not a white hair on your face but should have *its* effect of gravity.
Falstaff—*His* effect of gravity, gravity, gravity.

This form of the word occurs but once in "Paradise Lost;" yet a contemporary writer with Milton, John Bunyan, has made frequent use of the modern possessive form. For instance, Christian, when speaking of a picture seen at the house of Interpreter, uses this language:

It was the picture of a very grave person; it had eyes lifted up to heaven, and the best of books in *its* hand; the law of truth was written upon *its* forehead, the world was behind *its* back, and it stood as if it pleaded with men, and a crown of gold did hang over *its* head.

It is a noteworthy fact that a half-page farther on, Interpreter, in describing the same picture, uses the same words, save that he substitutes "his" for "its" wherever it occurs in the passage just quoted.

Now, from what and when did this word take its origin? Recently there has been con-

siderable discussion on this point. A writer in a late number of the *Independent* attempted to answer both, only to answer both wrongly. He puts it in this superficial way: "The modern form [its] was introduced by some printer about 1717." Well, the printers *are* chargeable with a great many blunders, but the introduction to the English-speaking public, in 1717, of a possessive case ending that has had an existence since the Aryans first cultivated the arable lands that bordered on the Oxus, is hardly to be classed as a blunder of the eighteenth century, or to be laid at an erring printer's door. Further than this, his date is a good many years out of the way. Shakspeare (1564–1616), as I have just shown, had employed it, and with John Bunyan (1628–88) and his contemporaries, it was a common piece of property. Had he put the date a good round century back of the one he had given us, he would have been nearer *its* natal day.

The late Dean Alford, in discussing this question and endeavoring to account for the frequent use of "his" for "its" in the older writers, says: "Possession, indicated by the possessive 'its,' seemed to imply a certain life, which things neuter could hardly be thought of as having"—which is all very fine in theory, but wholly contrary to fact. It is true that the first passage I have given from Shakspeare would, at first sight, seem to favor this view; yet, when we analyze the thought a little closer, this seeming ambiguity is entirely done away. It was the cooler and incredulous Hamlet who suggested to the hyper-excited mind of Horatio the impropriety of considering the apparition as having anything in common with life, and as nothing of his personal father, when he asked him if he had spoken to *it*. This changed the current of Horatio's thoughts and so led him to talk, thereafterward, of the Ghost as a ghost, not as if it was endowed with the attributes of a man. The Dean, though marvelously erudite in certain departments of literary matters, shows himself somewhat ignorant of the Anglo-Saxon literature, else he would have at once recognized the folly of such an explanation as he has given us.

Carrying our researches back to the time of the "Paston Letters" (certain literary productions of the fifteenth century), we find a key to our puzzle. Here we find the nominative and accusative forms of the impersonal pronoun occurring as *h y t*, which is, with the interchangeable vowel *i*, instead of *y*, the exact form of the nominative and accusative of the Anglo-Saxon third person singular, impersonal

pronoun; the full paradigm for the three genders being, in the singular, as follows:

	HE	SHE	IT
<i>N.</i>	he	heo	hit
<i>G.</i>	his	hire	<i>his</i>
<i>D.</i>	him	hire	him
<i>A.</i>	hive	hie-heo	hit

This ought to be proof enough to the most incredulous that neither upon the mistake of a printer (as the *Independent* would have us think) nor the incongruity of giving neuter objects a possessive case (as Dean Alford teaches) hangs the origin of our possessive *its*. "*His*," then, is no more or no less than "*its*," and "*its*" but "*his*" in a modern style of orthographic dress; both are one and the same thing in meaning, sense, and etymology, "*his*" being the purer Anglo-Saxon, that is all. The times change, and words may change in them, yet the sense of all will remain essentially the same as long as that language is spoken or written.

C. HENRI LEONARD.

GROWTH AND DECAY OF MIND.

"**L**EGAL Responsibility in Old Age, Based on Researches into the Relation of Age to Work. By George M. Beard, A.M., M.D. A Paper read before the Medico-Legal Society of the City of New York, republished with Notes, and Additions. New York, 1874."—is the title of a pamphlet before us.

The Relation of Age to Work, is, or should be, the true title of this very interesting pamphlet. The examples cited, and the entire view of the subject shows the relation of the mind to physical conditions, and the value and importance to a fine mind of a sound and healthy body—the medium through which it must act—the brain being considered a part of the structure of the body, and affected directly or indirectly by the condition of the entire physical organization.

The subject is not a new one with physiologists, although popular thought may regard it as new, particularly as applied by the author of this pamphlet. It is shown that the best and most powerful condition of the mind is at a time when the physical condition—"the basis of life"—is the strongest, and ripened by discipline and experience—a knowledge of facts and how to apply them to the best advantage. This he terms the golden decade, and is between the ages of thirty and forty; the silver is between forty

and fifty: the brazen, twenty and thirty; the iron, fifty and sixty; the tin, sixty and seventy; the wooden, seventy and eighty. The same relative rule is true of the production of plants and animals in proportion to the length of their life.

The author says, "Seventy per cent. of the work of the world is done before forty-five. and eighty per cent. before fifty. The golden decade represents about twenty-five per cent. more dates than the silver. The difference between the first and second half of the golden decade is but slight. The golden decade alone represents nearly one-third of the work of the world. The best period of fifteen years is between thirty and forty-five years. There is considerably more work done between thirty-five and forty than between forty and forty-five."

The method by which the author arrived at his conclusions was in studying in detail the biographies of distinguished men and women of every age in all departments of intellectual life, and noting the age at which they did the original work by which their fame was gained. A large number of these names are cited, showing the age at which their greatest work was done.

Among those mentioned we are disappointed in not finding discoverers in astronomy and celebrated civil engineers. In all the departments of intellectual life there are none which will show and test the power of physical endurance and mental strain, and upon which both are necessarily dependent, as in the solving of long and complicated mathematical problems. They require great discipline and power of attention, and, like memory, which is also mainly dependent upon the same capacity, a decline of physical strength will be felt soonest in those occupations. It has long been recognized by writers on mental philosophy that the chief difference in the success of men consists in the power of attention, other things being equal. A head without the organs of Continuity and Firmness will never carry the possessor to fame and eminence, while one with those organs large will persevere and overcome many obstacles, and by constant discipline may outstrip one in a particular branch who has a better natural aptitude but lacks perseverance.

In the *Popular Science Monthly* for January, 1874, is a very excellent essay on the "Growth and Decay of Mind," written by the eminent astronomer, Richard A. Proctor. It appeared first in the *Cornhill Magazine* for

November, 1873, and was founded upon a very condensed report of this paper of Dr. Beard's. They should both be read by all persons, and will command the attention of thinkers.

AGRICULTURAL HINTS.

The Origin of the "Duchess"

BREED OF CATTLE.—A writer in the *Mark Lane Express* gives the following history of one of the most fashionable and valuable strains of short-horned cattle. He says: "As the Duchess tribe has become so famous, and sells at such enormous prices, I may here give a few particulars regarding it. The first of the family we hear anything of was bought by Charles Colling from the Duke of Northumberland's agent at Stanwix, a massive, short-legged cow, of a yellowish-red color, with the breast near the ground. She had a wide back and was a great grower. Colling called her Duchess, and had often described her to Bates as a very superior animal, particularly in her handling; and told him he considered her the best cow he had ever seen, but that he could never breed so good a one from her. She was descended from the old stock of Sir Henry Smitson, of Stanwix. Thomas Bates bought from Colling one of the descendants of this cow in 1804 for \$500, being the same I have mentioned as being such a fine dairy animal; and he bought another at Colling's sale in 1810. For the latter he paid \$915, and styled her Duchess First, and from her all the present family have descended. Bates tells us he was induced to select this tribe from having found that they were great growers and quick feeders, with fine quality of meat, consuming little food in proportion to their growth, and also from finding that they were great milkers."

Economy of Seed. — Experiments have recently tended to prove that roots and grains, by being planted much farther apart than is usual, will actually yield larger crops than are now obtained. This has been shown to be the case with potatoes, and more recently with wheat. It has been found that the wheat plant increases above the ground in proportion as the roots develop without interference with those of its neighbors. In one experiment wheat thus treated furnished ears containing one hundred and twenty grains. It was found in the course of the same experi-

ments that on every fully developed cereal plant there is one ear superior to the rest; and that each ear has one grain which, when planted, will be more productive than any other. By selecting, therefore, the best grains of the best ear, and continuing this experiment through several generations, a point will be reached beyond which further improvement is impossible, and a fixed and permanent type remains as the final result.

Colonial Farmers.—Few of us of the present generation can realize the hardships and privations which the early farmers had to endure. They were strangers to the climate as well as to the country. They could have had little experience of pioneer life. They knew little or nothing of the natural products of the soil at the time of their arrival. All these they had first to learn the value of and then how to grow them to meet their necessities.

One of the chief obstacles the early colonists had to encounter, to add to the hardships of their lot in the cultivation of the soil, was the difficulty of procuring suitable implements. A few, no doubt, were brought with them, but all could not obtain them in this way, and the only metal they had was made of bog-ore, and that was so brittle as to break easily and put a stop to their day's work. Most of their tools were made of wood, rude enough in construction and heavy of necessity, and little fit for the purpose for which they were made. The process of casting steel was then unknown. It was discovered in Sheffield, England, but not till the middle of the last century, and then kept a secret there for some years. The few rude farming tools they had were, for the most part, of home manufacture, or made by the neighboring blacksmith as a part of his multifarious business, their being little idea of the division of labor, and no machinery by which any particular implement could be exactly duplicated. It is wonderful that they got on so well as they did. They were heroes in their way, and we ought to hold them in lasting honor.

[Contrast the present with the past! Look

at our mowers, reapers, thrashers, cultivators, steel plows, and the hundred and one new and convenient implements now in use among farmers! Do we not progress? Who says the world is not growing better? Let those whose mouths draw *down* at the outer corners consider how much more amiable they would look did they incline up instead. We believe in progress and improvement.]

A FARMER'S SONG.

WE envy not the princely man,
In city or in town,
Who wonders whether pumpkin vines
Run up the hill or down;
We care not for his marble halls,
Nor yet his heaps of gold,
We would not own his sordid heart
For all his wealth thrice told.

We are the favored ones of earth,
We breathe pure air each morn,
We sow—we reap the golden grain—
We gather in the corn;
We toil—we live on what we earn,
And more than this we do—
We hear of starving millions round,
And gladly feed them, too.

The lawyer lives on princely fees,
Yet drags a weary life,
He never knows a peaceful hour—
His atmosphere is strife.
The merchant thumbs his yardstick o'er,
Grows ragged at his toil—
He's not the man God meant him for—
Why don't you till the soil?

The doctor plods through storm and cold,
Plods at his patient's will,
When dead and gone he plods again,
To get his lengthy bill.
The printer (bless his noble soul!)
He grasps the mighty earth,
And stamps it on our daily sheet,
To cheer the farmer's hearth.

We sing the honor of the plow,
And honor to the press,
Two noble instruments of toil,
With each a power to bless,
The bone—the nerve of this fast age—
True wealth of human kind—
One tills the ever-generous earth,
The other tills the mind.

Spring Plowing.—It is certain that land plowed in the autumn will, all other things being equal, yield better than that broken in spring. This is partly because thorough aeration of the soil is essential to its fertility; partly because the frost has freer action to break up the minute minerals and hasten their disintegration and the consequent

liberation of mineral elements of fertility, and partly because, in the loosened earth, the surplus water drains quicker away, and the warmth of the sun penetrates sooner and deeper. But many fall-plowed fields are so situated that surface-water collects in hollows, and these nullify all the rest; carefully drawn open furrows for such places should be the subject of the first work in spring. In newly plowing land run the furrows in such a direction as to facilitate drainage, and run the shovel as deep (and no deeper) as it can go without turning up the cold, unfertilized and lumpy subsoil. It will pay.

Bees in the United States.—There are two million bee-hives in the United States. Every hive yields, on an average, a little over twenty-two pounds of honey. The average price at which honey is sold is twenty-five cents a pound; so that, after paying their own board, the bees present us with a revenue of \$8,800,000. To reckon it another way, they make a clear gift of over a pound of pure honey to every man, woman, and child in the vast domain of the United States. Over twenty-three and one-third million pounds of wax are made and given to us by these industrious workers. The keeping of bees is one of the most profitable investments that our people can make of their money. The profits arising from the sale of surplus honey averages from fifty to two hundred per cent. on the capital invested.

WISDOM.

TRUTH sometimes tastes like medicine, but that is an evidence that we are ill.

NEVER talk to a man when he is reading, nor read to a man when he is talking.

If you would not have affliction visit you twice, listen at once to what it teaches.

LONGEVITY.—Labor, in general, instead of shortening the term of life, increases it. It is the lack of occupation that destroys so many of the wealthy.

SOME people have softening of the brain, but the world suffers more from those who have hardening of the heart.

INFLUENCE, good or bad, comes not from the opinions a man possesses, but from the character he has formed and the life he leads.

AN honest reputation is within the reach of all men. They can obtain it by social virtues and by doing their duty. This kind of reputation, it is true, is neither brilliant nor startling, but it is the most productive of true happiness.

HE that gives good advice builds with one hand; he that gives good counsel and example builds with both; but he that gives good admonition and bad example, builds with one hand and pulls down with the other.

Six days filled with selfishness, and Sunday stuffed full of religious exercises, will make a good Pharisee, but a poor Christian. There are many persons who think Sunday is a sponge with which they can wipe out the sins of the week.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

"It's really very odd, my dear," said an old lady one very hot day to a friend, "I can't bear the heat in summer, and in winter I love it."

THE LAST TRIUMPH OF ADVERTISING.—A sufferer writes to the celebrated Dr. Pikemoff to express his gratitude, in these words, "I saw your advertisement—and am a well man."

THERE are two reasons why some people don't mind their own business. One is that they haven't any business, and the other is that they haven't any mind.

A WATCHMAN who lodged in the boiler-room of a factory at Flushing, was asked if he was not afraid of being blown up, and answered with a

sickly smile, "No, I'm a married man." The brute!

"JULIUS, can you tell how Adam got out of Eden?" "Well, I s'pose he clum de fence." "No, dat ain't it." "Well, den, he borrowed a wheel-barrow and walked out." "No." "I gubs it up, den." "He got snaked out."

A FEW days ago a very handsome lady entered a dry goods house and inquired for a "bow." The polite clerk threw himself back and remarked that he was at her service. "Yes, but I want a buff, not a green one!" was the reply. The young man immediately found that he was wanted in another part of the store.

IRASCIBLE OLD PARTY.—"Conductor, why didn't you wake me, as I asked you? Here I am miles beyond my station!" Conductor.—"I did try, sir, but all I could get you to say was, 'All right, Maria; get the children their breakfast; I'll be down in a minute!'"

A DETROIT policeman heard that a citizen of Twelfth street had been badly injured, and he called at the house to obtain particulars. He found the man lying on the lounge, his head bound up, and his face very badly scratched, and he asked, "What's the matter; did you get run over, or fall down the stairs?" "No, not exactly," replied the wife; "but he wanted to run the house his way, and I wanted to run it my way, and there he is."

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

WATER-BRAIN.—A child, two years of age, recently died, having a head measuring about thirty inches in circumference, which was increasing in size very fast. What effect would such fast growth of brain have upon the skull? It is considered a great curiosity here, and any information which will reveal the cause of this strange phenomenon will be gratefully received. The parents were first cousins. "OBSERVER."

Ans. Hydrocephalus, or water-brain, is a disease similar to dropsy of the body. It consists of an

accumulation of a watery fluid in the ventricles or convolutions of the brain, or between the membranes, or between the skull and the membrane, called *dura mater*, which lines the skull. The causes of this disease are numerous—the more common are scrofula, sometimes induced by inter-marriage of blood relations, sometimes induced by the marriage of persons of extreme yet similar temperament, especially the *blonde*, or sanguine, lymphatic; sometimes by bad ventilation, or the use of coffee by the mother and tobacco by the father. Other taints, such as scorbutic, or syphilitic, repelled eruptions; bad dietetic habits of the mother during pregnancy, or injuries of the skull and brain at birth.

The skull grows fast enough, generally, to nearly cover the brain in these cases, but it is usually very thin, as to make it thick would require more bone material than the little patient could afford. Most children seriously affected by this disease die before the fifth year; some are bright, but generally there is a lassitude, which becomes dull-

ness and imbecility if life be prolonged to ten or twenty years. We have, in our collection, the head of a man who lived to be thirty years of age, and was, for a wonder, intelligent, and he had nine pints of water taken from within the skull after death. In 1850 we saw in Ohio three cases in one family; they ranged from seventeen to twenty-seven years of age, and were obliged to have a head-supporter affixed to their chairs, which, after an hour or two of sitting in the morning, when rested, they were obliged to use for the rest of the day. They were stupid, half idiotic, the offspring of first cousins. People often ask us if we are opposed to the marriage of cousins. A few such families as the one just mentioned, and many other deformed people either in body or mind, are generally called to remembrance when such questions are asked.

HEAD MEASUREMENTS.—Suppose one man have a head measuring twenty-four inches and another man's head measures twenty-two inches. If the head of the latter measures as much in front of the ears as that of the former, will he have as much intellectual capacity as he who has the twenty-four-inch head, the size of the body, the activity and health being the same in both?

Ans. Yes. On the same principle that two may have equal conditions for the faculty of seeing when they are not equal in hearing powers. We have often published statements equivalent to this, viz., One may have a large head and the largeness may be made up in the regions of propensity or sentiment, and the man may be only medium in intellectual development and power. Or one may have a large intellectual region and a small development of the regions of emotion and sentiment, and he will have superior talent with a head only medium in size. When all parts of the head are equal, if well sustained by a good body, each part is supplemented and sustained by every other part, and the mind is best rounded out in all its functions; but a man may be great in intellect and weak in character, and *vice versa*.

MEMORY.—I have what is termed a good memory of everything but dates and amounts. How can I improve this part of my memory?

Ans. The memory of dates is dependent upon two facts; the absolute time in the chronological scale, and upon the memory of figures, which express dates. You may be somewhat defective in the faculty of Form, which remembers the outline of the figures or numerals. You may be somewhat deficient also in the sense of Number, and also in Time. When you wish to remember an amount, consider how it looks when expressed in figures, and try to remember the picture which the figures make. You can think how 1863 looks. We know a lady who remembered that something happened in 1777, because she remembered the three long-tailed 7's coming below the line, as they used to write them fifty years ago. It was the shape of the figures, not exactly how much

they amounted to, but the way they looked when written, which enabled her to remember it. In remembering dates, try to fix the year, and you will soon learn to classify facts that occurred in '71, '72, '73, etc. You can learn to group the facts together within the compass of the year or month. A well-balanced and harmonious development of the organs of Memory, especially if they be active and well trained, will produce a good memory of everything, *per se*, without any collateral aids; but, where one has any deficiency in memory, he must call to his aid anything which will suggest the fact, and so recall it. If you wish to remember the ages of persons, group together as many of your acquaintances as were born in 1840, or '45, or any other year, and when you think of the age of any one of them, the ages of the others will also be recalled.

WANTS TO STUDY MEDICINE.—Will you be kind enough to inform an appreciative reader of your valuable JOURNAL for the past ten years, what medical books it would be best for me to study? I am a book-keeper, and would like to study, evenings, at home.

Ans. In our "Special List," which will be sent on receipt of stamp, may be found titles and prices of standard works used in Allopathic, Homœopathic, Eclectic, and Hygieo-Therapeutic colleges. Choose ye.

COURTING BY CORRESPONDENCE.—If a lady and gentleman form an acquaintance by corresponding, say three years, and then meet, would it be advisable for them to marry after due consideration?

Ans. That depends on what may be the result of the "due consideration." If they dislike, No. If they like each other, and think it best, Yes.

YES, WE WILL DO IT.—You offer a scholarship in your class of "Professional Instruction in Practical Phrenology," which opens the 4th of November next, for 100 subscribers to the PHRENOLOGICAL JOURNAL, or 150 to the *Science of Health*, at regular rates. Will you allow me at the same rate for subscribers, whatever number I may get for each, and let me pay the balance of tuition in cash?

Ans. Yes, we will do it, though we prefer the subscribers; for that will serve to extend the influence of our subject, and do a permanent good. Get all the subscribers you can, and we will make you the appropriate allowance. Perhaps a sister or other friends will aid you, by canvassing, to swell your list, and thus assist you to obtain the course of instruction.

WANTS TO BE A PREACHER.—A young man—or shall we say a boy—of seventeen years writes us as follows: "If you can inform me what course to pursue to educate myself for the ministry, without going to college or any school beyond the common school, you will confer a great favor upon one who aspires for that position."

Ans. One may no doubt be qualified to preach without going through college, but why not go to college? There the best facilities are afforded for

acquiring the desired education. The time for an uneducated ministry has gone by; we now look to the pulpit for sense rather than sound.

EYEBROWS.—What freak of nature or sign is it when the eyebrows of some individuals are so much higher than those of others and wider apart. I've searched for an answer, but could not find a suitable one.

Ans. Did you examine "New Physiognomy?" Probably not, as the question you propound is considered therein. The "freak of nature" is due to *inherited* characteristics, and is not a mere isolated out-cropping without a definite parental connection. Where the eyebrows are low, you usually find a scrutinizing, reflective mind. Eyebrows high up and wide apart indicate less of the disposition to investigate and determine for oneself, and much susceptibility to emotional impressions.

SIGN OF LARGE CONSCIENTIOUSNESS IN THE FACE.—Among other things, look for two straight perpendicular lines, one on each side of Individuality. They extend from half an inch to an inch, up and down, and may be from a quarter to three quarters of an inch apart, sometimes more than this, according to the width of the head and face. A single perpendicular line, running up from the root of the nose, through Individuality, indicates more Firmness than Conscientiousness.

When there are three or more perpendicular lines, running up from the root of the nose, and a fullness of the middle range of perceptive organs, you will find large Self-Esteem, Firmness, Conscientiousness, and the entire crown of the head to be also well developed.

VOCAL CULTURE.—Will you please inform the public, through your PHRENOLOGICAL JOURNAL, how the voice may be improved?

Ans. 1. Live in accordance with hygienic rules, and secure good health. Then you have a basis. 2. Study "Ludden's School for the Voice." Price \$4. Or, as an introductory, "Monroe's," \$1.

CAYENNE PEPPER.—Is cayenne, or red pepper, a fit ingredient to be used in our food? Does it, or does it not, do us any damage?

Ans. 1. No. 2. It does.

Other questions, deferred for want of space, will be answered in our next.

What They Say.

THE POWER OF ATTENTION.—As a teacher of several years' experience among children of different ages, as a resident in many families where young children were growing up, and as a general reader, I have observed among the faculties of the human mind the exalted place which Attention holds as one of their expressions. It would seem to be to the mind what the

eyes are to the body, giving it cognizance of everything about it. The mind which possesses it with concentration and energy, holds a leverage, so to speak, which may raise the world. For it is through this instrumentality that nature unfolds her mysteries. They who exercise attention properly, learn not only what their own perceptions and observations teach them, but all that books teach about the universe.

A child that has the habit of asking questions and wishing to know the causes of things, has Attention in process of development, and if his parents and friends use tact, discrimination, and truthfulness in answering him, he bids fair to make the bright, faithful pupil at school, the brilliant light in philosophy, statesmanship, literature in the world; for when he grows old enough to question nature herself, the great minds of the world in the books they have written, he is led into delightful labyrinths of learning which develop mind.

Attention stimulates the reflective faculties in their action. Thus, when we look upon the ocean, our *attention* is drawn to its vastness, its grandeur, the wonders it incloses, and our emotions are strongly awakened. Now, *attention* is the *door* to these emotions, and to information. We may become accustomed to the sea-shore; we may go to it with minds absorbed with other thoughts; we may pay no *attention* to it for the nonce, and thus shut the door to the emotions and reflective faculties. If the mind be in such an abstracted state, it is because the attention is fixed upon some other subject of contemplation. We have scarcely felt the infinite value of the habit of attention to the things about us, and of impressing its importance upon the young. What is it that makes the merchant prince, the consummate general, the successful inventor or discoverer? Foremost among his traits stands attention to the object of his pursuit. Look at the teeming results to science of Newton's attention to astronomy and mathematics, of Franklin's and Morse's attention to the subject of electricity. Throughout the vocations and even pleasures of life, attention is the main-spring of success.

SHALL WE HAVE A FRENCH DEPARTMENT?—The following letter, of which a translation is appended, explains itself:

BROOKLYN le 6 Mars, 1874.—*Monsieur le Rédacteur :* Nous avons été informé que votre JOURNAL est le seul dévoué au sujet de l'Homme dans tous ses rapports, considéré au point de vue de la Phrénologie et de la Physiognomie, qui se publie dans l'Amerique; en tous cas nous n'avons jamais entendu parler d'aucun autre. Or il nous semble qu'un sujet aussi intéressant, et d'une telle importance pour tout le monde, ne doit pas être limité dans les bornes d'une seule langue; surtout dans un pays comme celui-ci que renferme tant de nationalités et de langues diverses. Et puisque la nation Française a un Lavater, et que Gall, le fondateur de la science de la crâniologie, a écrit dans la langue Française, ne serait-il pas bon, en égard au

grand nombre de Français qui se trouvent au Canada et dans le Etats-Unis, de consacrer une partie de votre JOURNAL—aussi petite que ce soit—à l'éclaircissement dans la même langue, des principes de cette science comme ils sont développés aujourd'hui? Nous sommes sûrs que non seulement la population Franco-Américaine, proprement dite, vous remercierait de cette concession, mais aussi que cette foule d'étudiants et d'amateurs de notre belle langue dans tout le pays en tirerait du profit. Nous avons grande envie, de notre côté de voir les vérités de cette science élaborées dans la langue dans laquelle elles ont été premièrement données au monde.

Respectueusement, AUGUSTE C.

[TRANSLATION.]

Mr. Editor: We are informed that your JOURNAL is the only one devoted to the subject of Man in all his relations, considered from the stand-point of Phrenology and Physiognomy, which is published in America; certainly we have never ourselves heard of any other. Now it seems to us that a subject so interesting and of such importance to every one ought not to be limited to the bounds of one language, especially in a country like this which contains so many different nationalities and tongues. And since the French nation boasts of Lavater, and as Gall, the founder of the science of Phrenology, wrote in the French language, might it not be found desirable, in consideration of the large number of French people now living in Canada and in the United States, to set apart a portion of your JOURNAL, be it ever so small a one, to the elucidation of these principles as they are being developed at the present time, in the same language? We are sure that not only the Franco-American population, properly so-called, would thank you for this concession, but also the many students and lovers of our beautiful language throughout the country would be benefited by it. For ourselves we have a great desire to see the truths of this science elaborated in the language in which they were first given to the world.

Respectfully, AUGUSTE C.

[Our space is scarcely sufficient to meet the monthly demand made upon it for the publication of current matter relating to scientific questions, and much as we are disposed to favor the proposition of our French friends, we could not curtail the usual quantum of reading given to our English-speaking readers without a strong protest from them. Were it practicable, we would like to have a German and a French department, fully believing that they would be appreciated by many subscribers.]

FUTURE POSSIBILITIES.—The science of Phrenology is no myth. It directs our thoughts onward and upward in this progressive age. I firmly believe that the time is not far distant when the telegraphic system will be superseded by the science of thought. Correspondence by letter will shortly be unknown. Friends, though hundreds of miles apart, can then communicate with each other through the medium of thought. Then it will be impossible to deceive. Witnesses can not impose on judge or jury. In fact there will be no need of juries. The judge will read the prisoner's thoughts, and determine his guilt or innocence. So will everybody else. The criminal will know beforehand that his "sin will find him out." A "guilty conscience will then need no accuser." His punishment will consist in his

being effectually banished from the presence of the society in which he moves. Mankind will become extremely sensitive. Public censure will be unendurable, and suicides will increase. Crime will cease, and then the millennium.

JNO. W. DEEM.

INDEPENDENCE OF THE MIND. —

Though man is doomed to helpless dependence, yet it is expected of him that he should exercise an independence of thought in every way becoming to an accountable being. It is just and right that we should exchange advice with our friends, and seek to know the advantages that lie concealed behind the doors of counsel, yet with due consideration for this, we must have minds of our own, free from the biasing influences that are too surely the results of association; minds that can struggle out of the trammels of prejudice and injustice. Thick and damp are the mists that we must sometimes battle through, and so cold is the breath of disdain that often passes by, that we freeze into inactivity for awhile; but on we must go. We find around us all kinds of human disturbances; parents tottering on the brink of ruin, with not enough of information and firm determination to proceed, leaving their children to the bent of poorly cultivated inclinations, resulting in the most distressing confusion and even crime; statesmen yielding to the popular side, thus placing the safety of home and country in danger; friend submitting to the unwise opinion of friend; and all for want of independent mental consistency. What a treat to the world it is for a steady, independent mind of superior intellect to rise and tower above the fluctuating, irresolute multitude! As we wend our way along the path of every-day life, how refreshing it is to see a noble face with a brave expression of dauntless pride lighting pure and honest eyes!

CAMP.

"SLOW OLD ENGLAND."—Englishmen of the old school, that is, of the beer-drinking sort, are not progressive. They seem to prefer ignorance, poverty, pauperism, and crime with their ale, whisky, and beer, to a more liberal, temperate, and intelligent policy. Note the late defeat of Mr. Gladstone, and the success—only temporary, let us hope—of the party of Mr. Disraeli, the so-called Conservative. Here is an extract from a letter just received at this office:

"You have most likely heard ere this the result of our late parliamentary elections. It has resulted in a considerable majority to the Conservative party. Mr. Gladstone's ministry have resigned, and Disraeli has formed a Conservative Cabinet. This is to be attributed in a great measure to the restriction of the grog-shop hours by the late Liberal government. It has offended the publicans and many of the beer-loving, liberty-loving subjects of the John Bull family! An Englishman's stomach is a kind of center around which his liberties revolve."

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[WHOLE No. 426.]



DR. DIO LEWIS,

ADVOCATE OF THE WOMAN'S HYGIENE AND TEMPERANCE MOVEMENT.

HERE is an original character. Nobody will ever mistake Dr. Dio Lewis for Dr. somebody else. His large rotund body and his large, well-formed head make him at once a striking and a conspicuous figure. Dr. Lewis stands nearly six feet high, and

weighs about 180 pounds. His complexion is fair, eyes a light blue, hair auburn, now turning gray. His skin is soft and fresh, with a healthy, peachy hue. His brain is very large, measuring about twenty-four inches in circumference, and is both long and high. His nature is peculiarly sympathetic. Though the intellectual organs are large, the moral sentiments are still larger, and he experiences the most exalted and rapturous emotions. Indeed, he is an emotional man, overflowing with good feeling, affection, charity, aspiration, and adoration. His brain is also broad through the region of Constructiveness, and he is inventive. He is not belligerent, and would rather avoid than seek controversy. His Destructiveness is moderate, and he can not be cruel. All his fighting will be done with tongue and pen, save in defense. What of his religion? Would he be inclined to hope, to believe, and to worship God? Look again at the portrait. See how high the head is from the ear upward to the top. See how long the head is from the ear forward. This clearly indicates a moral and a religious tendency. If it be asked us what particular church he may belong to, or what creed he subscribes to, our answer would be, we do not know; and yet we believe he will be found working as heartily with those of one Christian church as with those of another. When he worships God it is with little regard to creeds, forms, or ceremonies. His prayer would include all mankind.

Has he business capabilities? Yes, but he could never become absorbed in mere money-making. If he seeks money, it is for the purpose of usefulness; that he may carry out some reformatory enterprise, and not for the love of lucre. He is a very active man, a hard worker, though he works easily. He is, in brief, a live, original, energetic, enthusiastic, sympathetic, emotional, scholarly gentleman. He is emphatically Dr. Dio Lewis. Here is

the story of Dr. Lewis' birth, life, labor, and present pursuit. We are to hear more of him before he leaves this terrestrial sphere.

DIO LEWIS was born at Auburn, New York, on the 3d of March, 1823. Remaining in Auburn, he studied medicine with Dr. Lansing Briggs, of that city, and went to Harvard Medical School, Boston, when he was twenty years of age. He began to practice medicine before he was twenty-three, and was first located at Port Byron, in his native county. He removed to Buffalo two years later, and practiced his profession in that city about five years. In 1849 he married the daughter of Dr. Peter Clarke, formerly of the Broadway Hospital, New York. In 1852 Mrs. Lewis became an invalid, and the doctor took her South for the winter season; the next two winter seasons were likewise spent at the South. Mrs. Lewis was restored to health.

During Dr. Lewis' residence in Buffalo, the cholera prevailed there two seasons, the summers of '49 and '51. Dr. Lewis wrote several papers upon the prevention and treatment of cholera, which were widely published, and elicited spirited discussions among medical men. There he published a monthly medical magazine, in which very earnest and advanced views upon the treatment of many maladies were advocated, and, although his profession was that of medicine, he constantly deprecated the use of drugs in the treatment of the sick, and urged what he had already begun to call the natural methods. The employment of exercise as a part of the public education was earnestly advocated. While in Buffalo the doctor published a volume on the natural cure of certain common maladies.

At the close of the third season in the South, the business in Buffalo was sold out, and Dr. L. engaged in delivering public lectures on the subject of hygiene. These lectures were continued constantly for eight years. During the last four of these years he busied himself with the invention and development of a new system of physical education, which has since become known to the world as the "New Gymnastics." In England the system is known as the "Musical Gymnastics."

This system of gymnastics is entirely orig-

inal; is based in nature, and perfectly adapted to our physiological wants. It so thoroughly meets the needs of modern society by supplying the means for the correction of weaknesses in the muscular system, that the method is spreading all over the world. It has been adopted very generally by the public schools in Germany, and in the Gymnasia of Great Britain. A gentleman returning from St. Petersburg, Russia, two years ago, brought with him a programme of the closing exercises in a ladies' seminary in that city, a school patronized almost exclusively by the nobility. In this programme, beautifully printed upon white satin, there were three repetitions of the "Dio Lewis Calisthenics." A gentleman traveling last summer in Scotland had handed to him in two small towns a circular announcing that so and so was the only representative of the Dio Lewis System of Gymnastics in each of those towns. This system of gymnastics has already been incorporated as an integral part of the American system of public education.

At the conclusion of his eight years of public lecturing, Dr. Lewis settled in Boston, and began at once to organize the Normal Institute for Physical Education, which should prepare teachers of the New Gymnastics. The charter was obtained, a board of trustees elected, and a corps of able professors appointed. Among them was the famous Dr. Walter Channing. That institution has already sent out nearly three hundred graduates. They have taught in every state of our Union, including Oregon and California. Prof. Moses Coit Tyler, who graduated from the Normal Institute for Physical Education in 1863, spent some years introducing the new school of physical culture into Great Britain. Prof. Tyler's address upon "The New System of Physical Training, and Dio Lewis' Place Among Educators," delivered before the College of Preceptors, in London, in 1865, is one of the most remarkable papers from the pen of that well-known writer.

In 1864 Dr. Lewis established his famous school for young women on the battle-ground at Lexington, Mass. In that school were worked out many original and practical ideas. The arrangement of the times and seasons for keeping a school in session, the methods of teaching without class-books;

but more particularly a new system of discipline was inaugurated and successfully carried out. The discipline, if such it can be called, was simply the abandonment of all school government, so called. No record was kept of attendance or of behavior, or of progress in studies; precisely the same course was adopted that is seen in a drawing-room, where persons have assembled to spend a social evening. On such an occasion there are no rules, there is no government or discipline, but a sort of—it is difficult to say what—pervades the atmosphere of such a gathering, and every one behaves his best. During the history of the school at Lexington, and up to that unfortunate day in 1868 when the buildings were burned, there was no semblance of what may be called school government. The young women were not only allowed to go out and come in at pleasure, but received and entertained gentlemen friends without interference. Not a single departure from a high standard of morals and personal honor occurred during those years, and the progress in studies was remarkable. The school will ever be remembered by its pupils as not only the happiest period of their history, but as the period of ideas and high impulses. The school was the largest owned and managed by a single individual in New England. It produced a very deep impression upon our American methods of education for the better class of girls.

On the morning of the 7th of September, 1868, the splendid buildings at Lexington, which had cost so much thought and money, were entirely consumed by fire. The school, in a mutilated form, was conducted one more year in other buildings, and then abandoned. Dr. Lewis, greatly desiring to give himself to lecturing and writing, removed again to Boston, where he built the private hotel known as the Bellevue, on Beacon Hill, near the State House. He had two objects: first, to secure for himself a delightful home, and, secondly, to illustrate certain original ideas in the construction of city houses. In building the Bellevue Dr. Lewis put in \$7,000 worth of "kinks." That investment (in the kinks) has returned a large interest in the shape of extra yearly income.

Some years ago he prepared an article for

a New York magazine on the subject of city houses, in which he undertook to demonstrate that a million of dollars might be so expended upon a single square in New York as to pay an annual return of thirty per cent. upon the investment, and give the tenants more than twice as much for their money as they get in the present style of city buildings.

Nearly twenty years ago, Dr. Lewis prepared a lecture upon the power of "Woman's Prayer in Grog-Shops," into which he put much of certain dark experiences of his boyhood. He has delivered that address more than three hundred and forty times, and in twenty-one places inaugurated the Woman's Temperance Movement.

Lecturing before the lyceums of Southern Ohio last December, upon "Our Girls," a subject which he has been discussing both as a speaker and writer for many years, he delivered his temperance address on some spare nights, and the movement which had been begun so many times before, then and there took deep root. The whole world knows the story; as Dr. Lewis phrases it, "The hour had struck, the spirit of God was at length moving upon the hearts of his people; the soil was ready." Dr. Lewis is author of many volumes, all upon the subject of education in some of its aspects; "New Gymnastics for Men, Women, and Children," "Talks About Health," "Weak Lungs, and How to Make them Strong," "Talks About People's Stomachs," "Our Girls," and "Our Digestion," may be mentioned as illustrations of his works as an author. During 1874 he contemplates publishing several new and seasonable works, viz., "Chats with Young Women," "My Four Husbands," a novel, in which the natural treatment of consumption will be taught; both to appear through a New York publishing house; also "Chastity," to be published in Philadelphia, and "Longevity," to be published in Boston. Dr. Lewis is likewise editor of the new Philadelphia weekly, "To-Day."

He proposes to give one or two years to the Woman's Temperance Movement. His heart is already full of the coming crusade against tobacco, which he proposes to inaugurate as soon as the whisky war is ended.

Dr. Lewis expects to spend the coming summer on foot in Ireland.

The success which has attended the great crusade of the women against the sale of intoxicating beverages has been as much a matter of surprise as of gratification to those who desire a moral reformation in that most pernicious of trades. The movement has not proved a mere effervescence of outraged justice and wounded feeling, but a steady, persistent effort. It still goes on, and, in the words of the *Interior*, "holds its way and accomplishes its work. It was expected by no one that the first fervor would be maintained perpetually. No one of intelligence supposed or said that it would sweep intemperance away in ninety days. But every friend of temperance knew, on general principles, that as soon as the persistence of the women showed signs of fatigue, there would be a loud and long blast of asinine music which should be meant to articulate, 'I told you so!' We have heard of trumpets giving an uncertain sound, but these trumpeters can never be mistaken. Their voices could be distinguished, and would be recognized, though every passenger in Noah's Ark were present to join in the concert."

The intensity of the spirit which stimulates those noble women in the bitter fight may be inferred from the hymns they sing while laying siege to a dram shop.

The deep and moving pathos, and yet the encouraging truthfulness of "Nearer, my God, to Thee," are worthy of more than a passing notice. The hymn is not new, nor yet so old that all our readers may be familiar with it. At any rate, it may serve for the use of those who would like it in a form separate from the ordinary compilations of church and home music.

When such words as "I told you so" are heard with reference to a matter like this, one may know on which side of the question the self-appointed prophet stands. He is opposed to the movement, and, of course, on the *wrong* side. "He that is not for me, is against me."

Should the movement go no further, a great gain has been secured to the cause of Temperance. Many converts have been made, and the civilized world has been notified of the great sinfulness of drunkenness. What has been gained will not be lost.

Hitherto the temperance movement has

been conducted on *secular* grounds, and it did not make much headway. The quantity of liquors drank was not greatly diminished. Now the churches have taken hold of it, and promise to do something more than look

on and deplore the "exceeding sinfulness of this sin." They will organize in strong bodies, and come down as a moral avalanche on this soul and body destroying curse, and wipe it out.

NEARER, MY GOD, TO THEE.

1. Near - er, my God, to thee, Near - er to thee: E'en tho' it be a cross That rais-eth me,

Still all my song shall be, Near - er, my God, to thee, Near - er, my God, to thee, Near - er to thee.

Though like a wanderer,
Daylight all gone,
Darkness be over me,
My rest a stone,
Yet in my dreams I'd be
Nearer, my God, etc.

There let the way appear
Steps up to Heaven;
All that thou sendest me,
In mercy given,
Angels to beckon me
Nearer, my God, etc.

Then with my waking tho'ts,
Bright with thy praise,
Out of my stony griefs,
Bethel I'll raise;
So by my woes to be,
Nearer, my God, etc.

Or, if on joyful wing,
Cleaving the sky,
Sun, moon, and stars forgot,
Upward I fly,
Still all my song shall be,
Nearer, my God, etc.

Department of Religion and Psychology.

Know,

Without or star, or angel, for their guide,
Who worships God shall find him.—*Young's Night Thoughts.*

The soul, the mother of deep fears, of high hopes infinite;
Of glorious dreams, mysterious tears, of sleepless inner sight.—*Mrs. Hemans.*

THE STUDY OF THE MIND NEXT TO THE STUDY OF THE BIBLE.

"**K**NOW thyself" is a command as simple as "Love thy neighbor," and, without doubt, one is practiced as often as the other, while as a rule both are sublimely disregarded. To know ourselves, with our complex nature—its faculties, harmoniously discordant, blending by their very opposition all discord into harmony—is to know our brother man, to understand the secret workings of his inmost soul, to know what will melt him to tears, what inspire him with heroic daring, what fire his being with the cry

of anger or revenge. As he who has learned to play upon one piano-forte has learned to play on all, though not perhaps with equal power or equally happy results, so he who has carefully studied the laws which govern a single human mind is acquainted with the springs which move the population of the globe itself.

When men who are ignorant of their fellow-men attempt to place themselves before the ranks as leaders, either financially, politically, or religiously, we are not surprised

that the verdict is so often—"Failure;" while men of less talent, but with greater penetration and with more correct knowledge of the laws by which mankind is governed, are often thrust to the very front.

Of all sciences we have been slowest to recognize the science of the mind. The subject is considered too obscure for the uncultured, and is consigned to those only who have pursued an extended course of study; and the consequence is, that while men are engaged in careful research upon other sciences equally abstruse and difficult, this, the chart and text-book of which lie within us, is left to the mere hap-hazard of circumstances.

We study the body with unwearied interest; have books, pamphlets, papers, lectures, sermons, upon the laws of health; but what of the mind, that organ without which every other, though perfect in structure and robustness, would be useless and invaluable? Ignorance of our mental requirements and of the relationship which exists between the body and mind, leads us into many a gross error. We attribute much to the physical which belongs to the intellectual, and to the intellectual which belongs wholly to the physical. Many a physician owes his entire success to his penetration and knowledge of the mental peculiarities of his patients. Many a minister in the foremost ranks is indebted for his popularity to the fact that he has made human nature, rather than theology, the subject of his thought and investigation. There is no more complete concordance to the Bible than that which is furnished by humanity itself. Blot the Bible out of memory and existence, and the demand of our spiritual being would soon supply another. Whatever truths are evolved from human nature will ever have about them a freshness and vivacity, an appeal to each one's individual interest, with which no other subject, however carefully elaborated, can ever be invested. Shakspeare to-day receives increasing homage on account of his discernment of character. His portraiture of the passions of envy, jealousy, remorse, and dread of futurity, are as true at the present hour as in that age when they were culled. Herein also is the reason which renders the New Testament writings so vital and pungent in their ap-

peals to every human heart; they speak as man to man, as one who knows what he affirms to be truth, and who, strong in this conviction, does not hesitate to hand it down to remotest ages. Our Guide and Teacher, knowing man's susceptibility to surrounding objects and circumstances, did not refrain from making use of these when, pointing to the flowers at his feet, he said, "Behold the lilies of the field." And again, as a flock of birds passed by in their noiseless flight, he cried, "Behold the fowls of the air," making direct application of the incident. Knowing, as He knew, that man's nature was susceptible to the lightest and most trivial changes and impressions, He sought by the most complete adaptation of circumstances to render this quality subservient to His divine teachings.

A minister who studies the Bible in utter ignorance of the laws of our intellectual being, and who seeks to bring its truths before his people in the same blind fashion, need not be surprised if, after years of earnest endeavor, he is compelled to pronounce his ministry a failure. He has studied the Bible, ecclesiastical history, homiletics, everything but his people and their needs. What does he know of the opposing forces in every man's nature which must be either coaxed or contended with before he can be brought to a knowledge of the truth? If he ever gave an hour's thought to such considerations it was so long ago, in such a remote past, that he has put it away as "among childish things." Our ministers too often shut themselves away from humanity instead of seeking an acquaintance with it; they speak from books to books rather than from heart to heart. Occasionally we hear of one, even late in life, changing his tactics, and speaking from a vital, living experience, and each time the result has been a matter of surprise to himself and of thanksgiving to God. A minister should study his people, study the times, and fit himself for rapid changes of opinion and public sentiment. He should know how to make use of that thought which is uppermost in men's minds.

Permit me to illustrate by a case at hand. In a small town of Central New York a suicide occurred recently, a thing before unknown in the history of the community;

before twenty-four hours had elapsed another had taken place, and before the next day's sun had set a deed of most atrocious horror was committed. There seemed to prevail a mental contagion throughout the place; the mind had grown familiar with horrors, and the imitative faculty was thoroughly aroused. Public sentiment was all inflamed, and appeared to need but the slightest spark to cause ignition. Men looked one upon the other, wondering what new calamity awaited them, and still expectant of coming evil. But the blessed Sabbath was close at hand, and from the preacher's desk there fell words, not of "righteous" indignation, but of heavenly wisdom. He sympathized with the people, shared for the time their sentiments, then calmly explained to them this strange mental contagion; he spoke of its causes, the influences by which it had been propagated, and with a wonderful skill, born of a knowledge of the faculties by which mankind is alternately influenced, he calmed their present fears, assuaged their excitability, and finally sent them from him, having done more to arrest the evil than the most vigorous civil authority could have suggested.

That man had studied human nature to some purpose. If he had been pursuing a series of sermons upon Job or Noah he would have laid them aside, but a very large proportion of our clergymen would have rushed in blindly, utterly unmindful of public sentiment. A man thoroughly acquainted with himself, with his own complex mental organization, knows that he alone is, as Beecher has it, "a whole omnibus full of people;" one he must coax, another force, another restrain, another kindle, another soothe, and they will all keep their places and be very agreeable companions while they know that a master-hand holds the reins. Without such self-knowledge a man can not do more than drift or float; unconscious that he himself is to guide these contending forces, he permits *them* to guide and control *him*, generally giving to one or two full license to do what they will with him. He has, perhaps, studied his Bible faithfully, but he needed also to study himself; then, with the command all his own, he can direct thought and action, each power of his being, into the legitimate channels which lead to the true source of

purity and knowledge. God never meant that man should be placed in the world helpless, powerless, subject to the absolute control of each contending passion; there is harmony and subjection in these opposing faculties, and it is in man's power to choose which he shall grant the greatest liberty, which he can indulge with safety and freedom to himself.

There is, then, no such auxiliary toward the advancement of Bible truths, no John the Baptist of present times to prepare the way for their reception, more able or more efficient than the knowledge of self, the study of one's own mental faculties. Montaigne says, "We are not naturally so natural as we are thought to be;" and when we come to understand ourselves, our hidden but true natures, to bring forth those qualities which pride has smuggled from our consciousness, we shall realize that much which we have before approved must be condemned; some things which we have condemned approved; and when we have removed the flimsy vail of vanity through which we look as through a soft moonlight upon our follies and our weaknesses, we shall be better able to receive the simple, forcible, but homely truths of the Bible.

J. A. WILLIS.

THE LAW OF LIFE.

BY ELIZABETH W. DENNISON.

A BRANCH of yellow autumn leaves,
So steeped in sunshine through and through
They seem like stuff that Nature weaves
When all her homespun work she spurns,
And from her loom, that glows and burns
With all the splendor it achieves,
Doth show what she loves best to do.

I held it 'twixt me and the sun—
The lovely, shining, beechen spray;
The breeze blew fresh, and one by one
Came fluttering down the leaflets fair,
Till all the twigs were brown and bare.
"Ah! thus," I said, "my life doth run,
And thus my hopes are flown away."

A foolish thought. In vision clear
God's answer came to comfort me,
"The golden hopes would soon be sere,
They dropped away to leave a place
For nobler life and richer grace;
Behold where swelling buds appear
To crown anew the leafless tree!"

A PARABLE OF THE KINGDOM;

OR, TYPES AND SHADOWS OF THINGS TO COME.

"The word by seers and sibyls told,
In groves of oak or fanes of gold,
Still floats upon the morning wind,
Still whispers to the willing mind."

IN the ancient days there were men who saw with other eyes than those of outward seeing, and heard with other ears than those of outward hearing; men of high, illumined minds, who walked in the light of the supernal world and drank daily of the fountains of unworldly wisdom and knowledge, being led by the spirit. Prophets they were, and poets—or both in one, or one alone. Singers were they, of the unsung—like skylarks at heaven's gate. Seers of the unseen and hearers of the unheard, they knocked boldly at the door of the unknown and it was opened to them, and they dwelt in the temple of the inner mystery. Not only that the cabalistic signs of the unseen—which are written in characters of colorless light to common eyes—were easy of translation and familiar of interpretation to them, but they looked upon all the shifting and changing phenomena of the outer world, not as other men looked—with eyes of the blind—but as on a panorama of spirit forms, each an eloquent sign of some unseen thing in the realm of spirit forces. The forms, the shapes, the colors, the motions of universal nature were to them the handwriting and the volitions of Deity. The sounds of running rivers were psalms, and the odors of blossoming trees incense, of praise. The goodly frame was all compact of spiritual meanings, and was to the soul of things as the letter of the written page is to the thought of which it is the visible sign and expression. Moreover, all human volitions existed to them in the place of secondary causes, behind which existed forevermore the great unseen and primary cause of all. Hence, all human institutions resolved themselves into simply so many outward and visible manifestations of the inward and hidden purposes of the Most High. Herein lies the secret of their wonderful powers of divination; they caught the subtle and hidden relationship of the seen with the unseen; and it was on the final recognition of this rela-

tionship that they depended for the true interpretation of their oracles. It is, therefore, not a matter for surprise that their deepest meanings are veiled in what is to us an obscure phraseology, since their methods of expression corresponded to their habits of thought, which were different from the outer world's, as the ideal and spiritual differ from the earthly and sensual. Now, some were prophets, but not all. As for these, what time they abode on the mounts of vision they were lifted above the obscuring clouds of earthly passions, and from those serene heights saw through the clear atmosphere of that upper world far along the vista of time, and in some instances discerned literal and objective phenomena taking place and form in far distant periods, and always as types of the interior state. How should they describe what they saw so as to be understood? At the period of fulfillment the nations would use a different dialect, have other habits of thought and styles of expression. How, then, should it be known what was prophesied and what was fulfilled. Trusting to the intelligence of future times to penetrate the disguise of their speech, they adopted the universal and enduring language of symbols. Nature was full of resources for this. Thus they ransacked her wide domain for illustrations. The beasts of the field, the birds of the air, and the fishes of the sea came flocking and trooping to their pages at the beck of their pen. The mineral kingdom was made to yield up its treasures to adorn, illustrate, and beautify their thought. Precious truths were compared to fine gold; and whatever was brilliant, sparkling, or lightsome, found its simile in rubies, gems, sapphires, and diamonds. But it was the animal kingdom that furnished the readiest, most varied, and abundant material for symbols. Accordingly, many of the prophecies were shadowed forth from this. Governments, kings, potentates, thrones, dominions, powers, and principalities, as foreseen to come, became lions, bears,

eagles, dragons, and reptiles, according to their respective functions and capacities. Science, which was foreseen should become a great incidental or direct agency for the ushering in of the kingdom of God on earth, was not and could not have been neglected in the prophecies. In at least one notable instance, hereafter to be discussed, an instrument of social and commercial science is symbolized at large and in detail by a huge sea beast—"Hugest of beasts that swim the ocean stream"—Leviathan.

Foremost among the poet-prophets, and distinguished for the vastness as well as for the accuracy of his visual range, stands the unknown author of the book of Job—most wonderful and beautiful of all the books in the world, as well as the oldest and obscurest of origin. All of the sacred or venerable in literature attaches to this book that can attach to any. When was it written? by whom? under what circumstances was this "magnificent poem" composed? and what is its meaning, scope, and purpose. Supposed to have been written about 1550 B.C., its authorship attributed to Job himself, to Moses, to Solomon, and to others, still little or nothing is known on any of these points, and the real meaning of the book is involved in deeper obscurity, if possible, than its authorship or date of origin. The difficulty has always been in looking backward instead of forward for a clue to the interpretation. Previous to eighteen or nineteen hundred years ago, it has little point or application. The book of Job is a parable of the kingdom. The date of origin is unimportant; the date and method of application must be looked for since the commencement of the Christian era. It is a parable—equal in scope to Christ's parable of the mustard seed, analagous in meaning and going broadly and minutely into detail. It recognizes modern institutions, science, literature, and art, as agencies for the building up and establishment of that kingdom. The first and leading act of the drama—the affliction of Job—is the analogue of the persecution of Christ in the person of His Church. The last act of the drama—the restoration of Job to health, friends, and prosperity—is the analogue of Christ's resurrection, in His Church, the final establishment of His Kingdom, and

the peaceful and happy state of the children thereof. It is not a magnificent poem; it is not a narrative of the life and times of an individual named Job—or, not those things merely. It is at once a poem and a prophecy. Indeed, as a poem it is so magnificent that the eye is apt to be dazzled by its brilliancy of light, and the ear entranced by its harmony of sound until the understanding is lost and fails to arrive at the deep meaning underneath. As an epic poem, it opens without ostentation of sound or scene. It begins with no bugle blast; no clash of cymbals is heard, or roll of drum. There are no signs of preparation to recite the exploits of a martial hero or blazon the triumphs of a statesman. The bard begins, in the midst of a scene of pastoral beauty and simplicity, to chant a sweet and simple lay of the life of a moral hero. "There was a man in the land of Uz," it reads, "whose name was Job; and that man was perfect and upright, one that feared God and eschewed evil." Soon the plot thickens, mystery enwraps it. A group of beings called the "Sons of God" is seen, and among them the evil genius of the world, Satan. Yet never once is abandoned the beautiful simplicity of the language, while allusions are made to the original actors with sufficient frequency to preserve the narrative form throughout. This poem displays much of the versatility, and far more profundity, than any of the plays of Shakspeare, greater dignity and sublimity of style and tone than the "Paradise Lost," besides containing more distinct passages struck through and illuminated with genuine poetic light than any work of its length yet written or translated into the English tongue. Compare it, if you will for a moment, to a running stream, and mark the natural order of progress from beginning to end. It begins a little, low-voiced rivulet, flowing purely and smoothly from a limpid and sequestered spring; leaving the scene of its birth—amid green fields and between blossoming banks—it wanders on a little space, receiving tributaries and gathering volume as it goes, until suddenly it rushes into rugged passes, lined with precipitous rocks that shut out the light of heaven. Anon it merges upon a vast marsh, through which it flows with a sluggish and despairing motion until at last, amid a tumult of heaving

and tumbling waters, with a rush like a whirlwind and a roar like a cataract, it debouches broadly and grandly into the illimitable sea. Again, nothing sounds more like a fine and powerful and deeply complicated piece of music than the reading of this marvelous poem. The opening passages are in the nature of a prelude to the heavier symphonies of the piece, and sound like the notes of an old time-hallowed harp, touched by the hand of some old Druid minstrel; while the pathos-breathing passages, descriptive of the suffering and sorrow of the perfect and patient Job, are like the low and long-drawn notes of a mellow flute. But at the last the music is that of a great, natural organ, pealing and echoing deep thunder, solemn and sublime. From whatever point it is viewed, as a poem, as a piece of music, or as a narrative, it is noticeable that the order is one of progression—from little beginnings to great endings—like the little leaven hidden in a measure of meal that at last leaveneth the whole lump; or, like the mustard seed growing from the least of germs up to a goodly tree. Considered as a simple narrative, it is natural, straightforward, and consistent, until by the introduction of Satan as one of the *dramatis-personæ*, and by the words he is said to have spoken, it becomes impossible not to see that this is no mere narrative of the life and experiences of an individual, but a deep-laid plot, involving the interests of the whole human race for a long period of time, if not for all time. Can any reasonable person, after reading the account of Satan's interviews with the Lord, and of the conversation held between them, say this is history—a veritable account of a literal transaction? Who was present as a witness at those august interviews? who heard the conversation on those memorable occasions? It is obvious that as the story proceeds all interest in it as a mere narrative is lost, the personality of the subject speedily merges into principles. There is a strange and unwonted lack of sympathy for the suffering martyr. Something conveys itself to the consciousness of the reader that it is not a real tale of suffering and grief, of mere individual application. And it is very strange that a man so woefully smitten, and so desperately diseased, should be capable of main-

taining a discussion for days continuously, and supporting his part with such vigor and eloquence as Job is shown to do in his controversy with his three friends. There is a grand disproportion, a sudden accession of dignity, toward the last—a sudden outburst of power not at all consistent with the course of a true narrative. While the beginning is as artless as the flowing of water or singing of birds, the closing pages glow with a deep, steady, supernatural light. There is a depth and sublimity of tone, incomparable and unaccountable on the hypothesis of mere storytelling. There is a grouping together of grand figures that plainly shows the author has dropped the experiences of the individual and is dealing with the providences of God. Again, the stupendous forms of animal life, described in the text as "Behemoth" and "Leviathan," could not have existed on this planet at so late a period in its history as when the book of Job was written. Moreover, the account implies a future for them, and the ascribed peculiarities preclude the possibility of their ever having existed on this earth at any former period. They are evidently symbols and types of institutions yet to come. To sum up in a few words the objections to the historical theory of interpretation: There is too much of the element of mystery, too much literalism in the department of the invisible and intangible—too much familiarity and outwardness of intercourse with spiritual beings. The evil genius of the world, as well as its Sovereign Lord, are as easily and readily represented in person as any of the minor characters of the plot. The calm and orderly movement of the historian's pen, maintained through the earlier periods, is supplemented in the later by the frenzy of a sudden and powerful inspiration. The comparatively even tenor of the discourse on moral and philosophical subjects all at once breaks up, and is lost in a series of stupendous and unimaginable events. The moral of the story is as plainly deducible from the first half as from the whole of it. If Job needed correction, the story of his affliction, found in the first of the narrative, supplies that want. There was no necessity of a zoological display of the divine power to convince him that God was greatly to be feared. The as-

sumption is at the beginning that Job was already a perfect and upright man, one that "feared God and eschewed evil." What more could be desired? He was not proud; he did not need to be humbled, being perfect in humility. His heart was not set on his riches; he was as notorious for open-handedness and benevolence as for wealth. Nowhere in the narrative is there to be found any adequate motive for his affliction. As a narrative it lacks motive and consistency. This greatest of parables sweeps backward in its application before the world was made, and forward to the time when the will of God is done on earth as it is done in heaven. Job's prosperity and honorable state before his affliction are emblematical of Christ's spiritual state previous to coming into the mortal sphere. Heir of all riches, he descended to the temporal state, suffered its extremest ills—not for his own, but for love's sake. Thus we get a glimpse of an adequate motive for the affliction of the patient and perfect Job. It was the love of God and not the malice of Satan that inspired it. Now, after this Job's circumstances were such that for a long period of time patience was the only virtue he could fully display. This sublime virtue gave him his great character more than all things else. That saved him and brought him out at last into the old light, peace and prosperity, with much increase. This experience of Job and his all-enduring patience, correspond to that period of the Christian dispensation called "The Dark Ages," when the little church of Christ lay prostrate and bleeding under the ban of Papal despotism; when the emissaries of Satan wrested first from them their property, took their camels from the grazing and their oxen from the plowing; when a breath from the Vatican, like a mighty wind, smote the four corners of their dwelling that it fell and buried their children in the ruins; when Job's wife—who was the weakness of the flesh—cried out: "Curse God and die." "Retract," was the cry from Rome; retract and save yourselves; yet to save themselves would they not retract, but heroically endured four centuries of unparalleled afflictions. Here the sublime patience of Job finds historic illustration on a grand scale. From the twelfth to the sixteenth century is

the period of application of the dolors of the parable. Job was a Protestant, represents the new Protestant Church; his whole argument was one prolonged protest. Never man suffered what he did of rapidly consecutive and crushing afflictions. Never were such atrocities committed upon any body of people as the early Protestants suffered; never were they so patiently suffered. But "God spoke to Job out of the whirlwind," and from this time his afflictions began to pass away. So the Reformation dawned; in its gray morning light the afflicted Church rose up and put on her robes of health; her friends flocked to her and gave her every one a piece of money and a ring of gold.

What was this "whirlwind" out of which God spake to Job, and what was it that came to the relief of the martyred Church? In the parable, after portraying a long series of calamities and sufferings for his subject, the Church, the prophet's vision emerges upon a period of vast and unprecedented scientific and material enterprise. By the discovery of new agents of force, it bursts upon the world in unheard-of splendor and power. It was the era of modern science. Steam and electricity were the powers of the whirlwind of human enterprise and endeavor. Under Divine Providence the institutions of science and art come to her relief; it was the types of Faust that gave the luminous tenets of Luther to the world. It was the printing press that spread out the platform of Protestantism in Europe. It was the obstacles to free intercourse between the nations of the world that kept back the Reformation for centuries. It is the possession of facilities for rapid and free intercourse that makes it no more possible for organized and long-continued oppression and outrage on the face of the earth to exist. It is from this conjunction of circumstances, demonstrating as it clearly does the essential unity of religious and scientific interests, that I take my departure for the interpretation of the two leading types or forms of ideas which the prophet saw evolved from the great intellectual commotion called "the whirlwind." Of the first of these two types, "Behemoth" and "Leviathan," I shall not go far into detail, as the material for it is not nearly so abundant as in the second. "It is singular,"

says Martyn in his "History of the Huguenots," "to notice the tendency of Protestantism in religion to democracy in politics." Might he not have gone farther and said that democracy is Protestantism in a political form? What is Protestantism but an organized protest against the traditions, usages, and usurpations of the Mother Church? and what democracy but an organized protest against the traditional usages and usurpations of the elder governments. Republicanism is plainly the offspring of Protestant liberty. The prophet traced the Reformation in an unbroken line of sequence down to our day, and descried its manifestation in a political form, and described it under the title of Behemoth, "the chief of the ways of God," which is a type of the stupendous structure of political Protestantism seen rising on the shores of the New World, and known to-day as the United States of America. A careful study of the text descriptive of Behemoth reveals the outline of a great political organization, and that not a monarchy. The Leviathan immediately succeeds the Behemoth in the progressive order of symbols, and evidently relates to some contemporaneous event. It is a wonderfully

close likeness of the largest ocean craft in the world, or that history gives any account of—not even excepting the Ark—known as the Great Eastern. Her, the prophet saw in his vision as the floating ark of the new covenant of unity among the nations of the earth, as the chosen instrument to break down the barriers to free intercourse between peoples separated by wide oceans, to link the continents together with cables of wire stretched across the bed of the great deep. When the Great Eastern accomplished her first essay of this herculean task, she accomplished something more than the mere spreading down of the cable on the floor of the ocean. She drew two great nations into closer and more sympathetic relations. She brought the whole world closer together, and drew around them as never before the bonds of universal brotherhood. When she sailed westward over the Atlantic, carrying with her and paying out that mysterious coil upon the ooze and slime of the ocean's bed, there sailed with her that other phantom ship, stretching that other viewless line that stopped not with the shore, but sent out and on its million lines to the heart of every American and every Englishman in the two countries.

[TO BE CONTINUED.]

THE LATE JACOB KNAPP,

THE REVIVALIST.

THE death of this well-known Baptist preacher at Rockford, Illinois, on the 3d of March, brings to mind the conspicuous part he played in the "revival" movements in religious circles for so many years. He was in many respects an eccentric character, more impressive to his hearer than admired, yet he possessed a degree of energy and earnestness when in the full maturity of his powers as an evangelical preacher such as few could claim. A writer in the *Examiner and Chronicle* says:

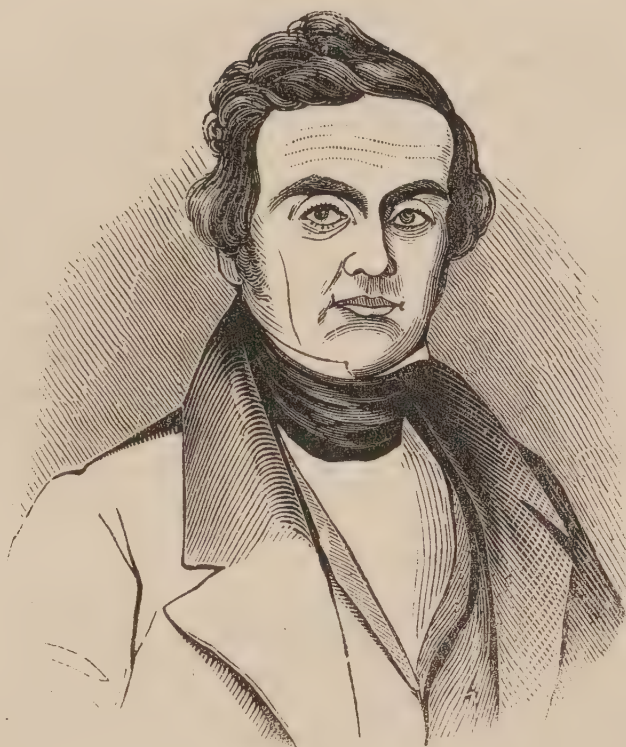
"I had known him since the summer of 1821, when he was a student at Hamilton. He was then a young man of earnest piety, but not equally consecrated to the spiritual life as in his after years. Study was a hardship to him, and failed to develop what was in him. He was born for action, and that

was the school to bring his great faculties into working order. The study could never have done it, and I believe he mistook himself in saying to me later in life, that his failure as a student was owing to the thickness of his blood from his previous hard occupation. He was not made for the cloister, but the arena, and never could have become powerful till he entered his proper school. Bienne did not make Napoleon, but the battle-field, where his faculties could find their fullest scope.

"I think I never knew a man so fitted, both mentally and physically, for great enterprises as Jacob Knapp. He had a short, compact body, with nerves of steel, capable of any amount of endurance, and of the coolest self-possession in the most tumultuous circumstances. His wit was always readiest

where that of other men is sure to fail. And the characteristics which made his eccentric reputation as an evangelist, I can distinctly trace to my first acquaintance with him. What he was then he afterward became on a more enlarged scale. His proclivities for business embarked him in trade before he closed his studies, and when he had been a year settled in Springfield, N. Y., where he began his pastorate, I found him in the midst of the broad acres which he had plowed and sowed with his own hands. Meantime he had not been unsuccessful as a

commended to the place by the venerable Dr. Nathaniel Kendrick. But the Board thought him, to use his own expression, "a little fanatic," and would not appoint him. He then went forward on his own account, and beginning in school-houses and small churches, he made his way to the first pulpits of the country, and developed a degree of talent that commanded respect from the first men among us. Dr. Nott, of Schenectady, said that "he followed up and took notes of Elder Knapp's sermons in that city, and he could publish a volume of them that would



THE LATE JACOB KNAPP.

pastor. From Springfield he went to Watertown, where he farmed it on a very large scale, doing at the same time good service as the pastor of the church. He was criticised for his business enterprises, but I think without reason. A man boiling over with energy like brother Knapp, could not have lived without giving vent to it in more ways than one."

At length he became so much penetrated by religious sentiments that he determined to enter the missionary field, and to that end sought an appointment from the New York State Convention. He was strongly rec-

be a credit to our first preachers." He was in his seventy-fourth year when he died.

Our portrait represents him in his prime, and indicates the strong man temperamentally and physically he was when fifty-five years old. Organization gives tone and color to expression, whether that expression be of the lips or the hands. That Elder Knapp preached of righteousness and judgment to come was natural; his broad head with its large Cautiousness, Conscientiousness, Firmness, strong Destructiveness, and his bilious temperament were of the type that appreciates the justice of God, and the importance

of fulfilling the law. Duty was his main-spring of action, and in striving to meet its requisitions the robust elements of his nature were developed in all their striking peculiarities. He claimed that a hundred thousand people had been converted by his preaching, and by his frightful pictures of the lost in hell.

The character of his oratory may be slightly inferred from a mention of some of the subjects he was accustomed to preach on, viz.: The Personality, Character, and Destiny of the Devil; Why God lets the

Devil Live; A Prayer-Meeting in Hell; The Goodness of God; Justice of God in the Damnation of the Wicked; My Ox Sermon; My Hen and Chicken Sermon; A Funeral Sermon on Men now Living; Where Cain got His Wife.

The *Independent*, however, says:

"It would be hard to determine whether he has done more good than harm. There are many things to regret in the present condition of the Christian church; but the disappearance of the class of preachers whom he represented is not one of them."

COURAGE IN THE RIGHT.

THERE may be some who'll gibe and sneer
At honest effort, but 'tis clear
That he who dares to do the right
Shall some day conquer in the fight,
If, heeding not the scoffer's cry,
He march right on e'er faithfully.

The grandest victories ever won
Are blessings sent for good deeds done;
And richer far than crowns of gold,
Or gems of fabulous wealth untold,
Is that bright crown of gratitude
The world gives to its brave and good.

Oh, toiler standing at the plow;
Oh, workman with the sweating brow,
Yours is the mission to fulfill
The carrying out of Heaven's will;
And yours the triumph of success,
If bravely on you ever press.

Take courage, then, and do your best;
There'll surely come a day of rest,
When sweetest flowers shall strew your way,
And chill December turn to May;
March with a hero's firmest tread—
"Be sure you're right, then go ahead!"

STOLEN GLIMPSES—No. 2.

IT may occur to some of my readers that it is singular that they never heard of my uncle Meanwell. I will here, then, state a few things which perhaps will mitigate this surprise.

He was born of parents in moderate circumstances, whom he, as he grew up, felt he must assist. Consequently, his education was delayed. He took a prejudice against a college course, and so, although he is a learned man, did not come by his book-knowledge in a regular way, has not had the prestige of a college behind him, or college faculty and class-mates to befriend him. [By the way, my uncle does not consider the classical but a small part of a complete education.] He has been deficient in Self-Esteem, sensitive, delicate in his feelings. He is much affected by the weather, or any change of outward circumstances. He is over-reflective, rather imaginative. You

could scarcely select a man so poorly constituted to do himself justice as a candidate. The longer he preaches in a place the better he speaks, and his hearers often wonder how they happened to secure a man of so much talent, and fear he will be invited away from them. Those who have heard him most, are most anxious to listen to him again.

It would have brightened his prospects had he in younger years taken a voyage to Europe. Then, no famous man was immediately related to him or disposed to assist him. With all his inward shrinking, he has been obliged to work his own way in the world, and also felt obligated to assist others along. About the time his ship was spreading her sails to prosperous breezes, he began to ponder unpopular opinions. Next, his conscientiousness led him to make some confession of those opinions. My readers can see what the consequence of this was. If he

had possessed the hardihood and enterprise of some, he might have mounted those opinions, and, like a royal knight, rode into notice. As it was, he kind of nursed them at first as some forlorn woman does her child, turning downcast eyes from a pelting world to the dear one she holds to her tender bosom. He is not wanting in natural courage or inward stir. The woman alluded to may not be.

The subject of marriage is a delicate one to give an opinion about, but it always seemed to me my precious uncle married full young enough, and that he made a selection which could not at the time assist his earthly prospects, you will believe, when I tell you in particular about it in the next article.

Were I to show this writing to dear uncle Meanwell, he would say that in my enumeration of obstacles to his fame I had left out the main ones, viz., his weaknesses, deficiencies, infirmities, and sins. But you perceive I have confessed weaknesses and misfortunes, and those, I claim, have been his chief impediments. Doubtless he has transgressed the law of absolute moral perfection, as all have, but all others do not feel as much humiliated as he by any defect or deflection.

Now I must hasten to improve an opportunity that occurs to copy more of those secret resolutions in which we see my uncle's very soul. I will set the date after the writing now. The italics, even, will always be his. Let me not alter a particle:

If others will not do well let it not spoil thee. To *dwell, ferment, is ruinous*. Thus we weaken the mind and impair the health. Look long enough to understand, consider what is wisest, carry it out, then dismiss. Let it not excite; let it not prey. This view I WILL carry out. Give conduct aimed at thyself *wide berth*. Let it not hit or enrage the mind. If you ought to do, proceed as for the insane. For thyself, as in matters not irritating.—1869, Jan. 15.

I am resolved, through and through. No more misgivings. I will attend practically to my duties, and give my mind to the work of life as it lies *before* me. It looks to me as the wise, natural, normal course.

Questions of difficulty—any that prey upon the mind—should be settled in secret. Generally we can manage to find a closet. At-

tention to company in company, from the whole soul, to work when we have it; to the responsibility when it is ours. It is instinct to postpone anxious points to leisure, as those fallen in water only consider how they may get to the shore. When we must think of questions in the presence of others, *think fast, decide, and let it go*.—April 26.

Much joking is not well, especially where persons are ignorant.—May 6.

Observant, deferential, yet not embarrassed manners, especially in the house and toward ladies. Rattling talk not best.

See the clerk, attentive, ready. If a man appears a perfect man *now*, he seems *always* to have been so, or to have corrected himself by angel-wisdom. If we appear easy and natural, it assists others to appear so. Be calm, deliberate, dignified. Don't over-do. Don't do for effect. Observe first. Man must never do, say, or even think what the good and wise must condemn.—June 7.

[Behold my blessed uncle's very large conscientiousness, his struggles to overcome his deficiencies, his yearning for the ideal, and the infallible intellect, the sagest conclusions for us all.]

What a victory (?) when one ponders upon the imperfections of *others* until one loses sleep, tranquility, tires the mind, and unfits it for good service (??). What a victory (?) if, by any means, these imperfections betray one into the indiscreet or wrong! Be *thou* calm, strong.—Rom. xii. 21.—June 8.

[Uncle has had any amount of hard work in the humble service of unpopular but invaluable truths, by which he has had to do with all classes and meet every possible irritation and discouragement.]

Courage. Self-preservation. Defer a work and thought unto its time. No revenge. Sleep nights. Holiness even in every thought. Do as well as you can. Others, nature, grace, common sense, Providence, universal experience, will reach and correct where you can not, and where you can. Be not morbid. Take no more than you can carry.—June 8.

Persons may, if *occasion require*, be earnest, decided, vehement even. In life generally, resolution, courage, activity, moving, magnetizing ways "carry the day."—Aug. 5.

Denounce sin rather than sinners. Contain and preserve thyself. Be content with the

good thou canst *reasonably* do. Thus wilt thou do most. Turn strength into gracious channels. Obtain natural and voluntary advantages. Thus again can most be done for the right. Submit to what can not be helped without the infliction of a greater evil.—Aug. 7.

People can see they must not allow themselves to be tired out just before performing some feat of *physical* exertion; not so likely to see they must not allow painful, injurious *mental* fevers, evils in themselves, previously to an anticipated occasion which will require full *brain* vigor.

Man is to be kept ready always, for any good word or work, like a loaded gun for the game.

Two ways of accomplishing: 1. By force and fight; 2. by skill, wisdom, energy, and love. Like the second best. Mercy for all races of being.—Aug. 7.

I will never jeopardize my health, or that of my family, merely to please or flatter somebody, placate them; nor will I for public applause.—Oct. 24.

No safety only in a present mind, close observation, positive notice, logical, healthful, vigorous thought. That is the basis of all action.—Oct. 24.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall!
Thou art the nurse of virtue.

JOHN AND JANE, AND HOW THEY KEPT HOUSE.

JOHN and Jane had good old-fashioned names. They were both good old-fashioned people. They were good old-fashioned people in this respect: they believed that industry and economy constitute the true basis of capital. Consequently, they believed that with the ability to work and save, no two were too poor to be married. They acted upon their belief, and in the honest endeavor to prove their faith, they set up housekeeping.

As may be already anticipated, John and Jane inherited no fortunes. So we will waste no time talking upon property matters. They both sprung from good stock. They were robust, healthy, and hearty. John was a carpenter. He had served his time faithfully, and learned his business well. Jane's domestic education had by no means been neglected. She was none of your incompetent, helpless sort of women. She knew how to bake, boil, stew, wash, and scrub, as well as how to make and do a thousand and one of those delicate, charming things so ornamental to a housewife's general capabilities. With such capital as this, with enough housekeeping utensils, conveniences, and ornaments to make home comfortable and inviting, and with sufficient cash in hand to place

them above all immediate embarrassment, John and Jane set out in the race of double life.

John and Jane adopted a thorough financial policy. "‘A penny saved is as good as a penny earned,’ is an old proverb," suggested John, as they were talking over some little matters about expenditures at the start. "Yes," replied Jane, "and I have sometimes thought a penny saved is as good as two earned." Happy thought of any household, to know that the two great ruling powers have one heart and one mind.

How happy Jane felt the first day she really kept house; when she looked upon everything about her, and felt that it was all her own to govern and control just to the fullest capacity of a free mistress of the house. That forenoon she washed the breakfast dishes. There were not many of them—only enough for her and John. Then she made the single bed, arranged the kitchen, and prepared for dinner. Noon passed; she cleared away again, washed and arranged as before. All these things were done, not only with the purpose of a most ardently dutiful nature, but with the delight that comes from working for and with those we love. When it was finished she actually felt a little flutter

of embarrassment. There was so little to do in keeping house for one's self, after all! She almost felt rebuked to think she was having such an easy time and so few cares. Oh, deceitful-eyed matrimony! Oh, poor, deluded woman! The evil days come and the years draw nigh when you shall no longer say, "I have little to do;" for labor and care shall come upon you heavily, and your burdens shall oppress you with a great weight!

I suppose the emotionally susceptible will imagine I have a harrowing tale of some sudden calamity, a heavy blow of dire adversity, that fell upon this happy family as the stroke of sudden death upon a strong man. No, I have nothing of the kind. It was something that came with stealthy feet; that crept in at their door when it was neither seen nor known; yet it carried everything but life before it, and even made life miserable and hard to bear. Shall I tell you what it was? It was not idleness; it was not carelessness; it was not faithlessness. It was what some blunt, practical people will call *ignorance*, but I will simply suggest it was a lack of knowledge, which may be an agent of serious evil, if we may believe what is written in Hosea, iv., 6.

John and Jane had each a spirit of positive independence resident in their individual selves. They had no beggarly solicitations to plead before this supercilious world. Not that they were obtrusive and haughtily opined, but they had solid thoughts of their own, and needed not, as they felt, to be told quite everything that might be of value to anybody. John had been a sort of independent young man from his youth up. He had seldom asked his "folks" for anything; had managed to provide for himself; had learned his trade, and, in short, had picked up considerable experience in this practical world. What he knew, he knew; what he didn't know, he could find out. So there was both the beginning and end of his philosophy. Jane was as much different from John as you might suppose it was quite likely any practical, independent woman would be. She never presumed upon her individual knowledge or experience of this world. Yet she had enjoyed advantages not within the reach of everybody. She had been educated by the instruction and discipline of the best of pa-

rents. True, they were plain, common people, but they were considered favorably in their locality, and had religiously "done what they could," and "loved much." Surely, all her opportunities had not been wasted upon her, and she felt fully competent, along with John, to grapple with this adverse world.

John and Jane had been keeping house but a brief period of time, when Jane received a caller in the person of Mrs. Nesmith, who lived but a few rods away. Mrs. N. was a matron whose course of life had about reached its meridian, and she naturally felt it her duty to call upon Jane, the new wife, and confer with her upon the circumstances clustering around the new domestic hearth.

"How do you enjoy your new experience in housekeeping, Mrs. —?" inquired Mrs. Nesmith.

"Oh! very well, I assure you, and thankfully, too, though I am sorry my house is in no better condition for your visit."

Mrs. N. involuntarily cast her eye about the room, but reproached herself for the act when she noticed a large, irregular, dark-colored patch on the top of the cook-stove.

"I hope you will excuse the appearance of my stove," said Jane. "I met with a little mishap in getting dinner to-day. I had just put a fresh stick of wood under the pot and turned to prepare the cabbage, when all at once it boiled over and left the spot you see."

"That reminds me of something I read yesterday in my *Weekly Housekeeper*," returned Mrs. N. "It was something that explained the science of heat in cooking victuals. I think it amounted to something like this: The heat of a boiling pot can not be increased by adding wood to the fire, because the heat used after the water once boils is all taken up to make steam. By the way, I should think you would like to take the *Weekly Housekeeper*. I get a great deal of information as well as good reading out of it. Why, I don't burn near as much wood as I did before I learned some of the things in it. I can do a washing a great deal easier. The paper don't cost much—only \$2.50 a year. In fact, I don't think I can get along without it now, at any reasonable price."

Now this was touching Jane upon a tender

point. Wasn't a penny saved as good as a penny earned? "Who could hope to live and lay up any thing, if they spent their money for every new-fangled notion that came along?" That was what her father always said, and he was a man of good judgment, too. But it was not Jane's way to appear irritated before a new caller, so she simply smoothed the subject over.

"I dare say it is a very interesting paper, but my husband thinks we can't afford to take another paper. We now take the *Village Note-sheet*, which gives us the news, and that is about all either John or I find time to read."

It may be entertaining to my readers to note—I once, for curiosity's sake, examined the *Village Note-sheet* and found its contents fully revealed what the publisher esteemed to be the dominant idea of the community he hoped would patronize it. The author of the *Note-sheet* published it to make money, and he edited it as if the mercenary spirit was the principal one that inspired his readers. I looked over the first page. Four of its five small columns were devoted to a story—"The Love Knot"—showing how a young couple loved, married, saved, and rose to "wealth and affluence." Then comes a column of insipid "Varieties," made up of stale jokes and silly allusions, just as if such material would serve the purpose of pure, fresh, vivacious humor. I had almost omitted the "poem" on "Summer Leaves," by Esquire Baxter's daughter, Amelia Eveline Baxter, in whose father's building was the *Note-sheet* office. I turned to the second page. "The Increasing Prosperity of Our Village" told how many new buildings had been erected the past three years; proposed a new street, to run from the Stile's Lot to the "Corners;" suggested nothing would help the place more than the support of "a live paper, which the *Note-sheet* was determined to be." Then come the locals. "Eben Birch, *Esq.*, has butchered his large hog. It tipped the scales at 528 pounds. Farmer Birch has kept strict account with this hog, and finds his pork, disposed of at market price, will net him a good, clear profit. This we regard as another proof that substantial farming pays." Then the village had been made lively by an occasion on which a well-

deserving and happy couple had been "united in hymeneal bonds." The wild-cat scare and the attack of fire received due attention. A few items of indifferent State, national, and foreign news crept along in their places. Marriages and deaths followed after. Over a page of advertisements completed the balance of the inside. On the last page were a few legal notices—mortgages, bankrupts, etc.—and then advertisements. This was the "live paper" out of which John and Jane got the news and what else they had time to glean.

The question may be asked, "Why couldn't John find time to read a paper?" Well, John enjoyed the advantage of being a first-class workman at his trade. He didn't delve merely for day wages. He was privileged to supervision. He could take jobs on contract. He could work as many hours and make as much time as he pleased. For all this the pay was more. Then John was ingenious at most any thing. He could turn his hand at home and do a good many odd jobs during evenings, and so save the money he would otherwise have to lay out. He was earning money all the time; that was why he couldn't find time to read even the *Village Note-sheet*.

If anybody ever prospered that worked hard and saved money, John and Jane prospered. Every week's end found them a little better off in this world's goods than before. It is true Jane sometimes let the pot boil over, and sometimes burned a pie; but she generally placed the pot on the back of the stove and opened the oven-doors when the fire was too hot, and no reasonable person said she was not a prudent, economical housekeeper.

There was a loud rap for admission one morning as John and Jane were taking breakfast. It was Farmer Birch, as he appeared in his long frock with ox-goad in hand, when John opened the door.

"Mornin'!" said Farmer Birch.

"Good morning!" returned John.

"Called ter see if ye wanted a load of wood hauled; got some first-rate, and sellin' reason'ble."

"How much do you ask?"

"Got two kinds; six dollars for dry and four dollars for green."

John's wood-pile was not quite exhausted, and his first thought was he would not purchase. Then the thought occurred he could save two dollars on a cord by buying it green. He suggested the idea to Jane, who indorsed it promptly. "I can use a stick of it occasionally along with the dry," she insisted, "and it will be seasoning all the time."

Thus John proposed and Jane disposed, and the wood was bought. Farmer Birch contracted to deliver an adequate supply of green wood at four dollars per cord.

It is needless to suggest that Jane's pot boiled over as before, and that her pies were frequently scorched as usual. I need not consider that one corner of her stove-door began to warp out of its original form, leaving an unsightly and unprofitable crevice where should be a close joint.

Not a long time after this little business transaction took place the baby came. Happy parents who behold the laughing eyes of their first-born! It was a boy—stout, active, and resolute—a "troublesome little comfort." Then the burdens on Jane's shoulders began truly to multiply. There was less order and precision about her household arrangements. The dinner-pot boiled higher than ever before, the pies were oftener scorched, and the ugly crevice in the stove grew wider. Night came, and Jane's work was less thoroughly finished up than usual, and John had more odd jobs and chores to do after work. Mrs. Nesmith was neighborly as ever. Many a time her charitable and neighborly hand assisted Jane over a hard spot in the dragging routine of housework. She even rolled up her sleeves at the wash-tub and became a servant to her neighbor's comfort and cause. She even suggested the saving results of the new washing machine and wringer. She also mentioned the new washing preparation, which acted chemically on the accumulations, she could not tell just how, but the *Weekly Housekeeper* informed her of it, and it had saved her a good deal. But such things were not to be considered in Jane's economy, as she intended and determined to be the type of all prudent, saving wives, whose husbands never complain of their improvident tendencies.

It would answer no definite purpose to say just how much money John and Jane av-

eraged every month to put by; but it was more than every couple saves, even if the husband has good pay and the wife is considered nothing less than a prudent housekeeper. It was all put where it drew "tolerable pay," and formed the substratum of a perpetually accumulating fund, never, if possible, to be encroached upon. We will turn our attention to that cloud which may often begin no larger than a man's hand, though it is pretty sure to swell to the size of a mountain.

By dint of accidental observation, John found that his own wood-pile decreased faster than some of his neighbors'.

"Jane," he accosted one evening, "why is it we burn so much more wood than our neighbors? I have to buy almost two loads to Mr. Nesmith's one."

This was said a little petulently, for John was tired. Jane was also a little irritable, for she was tired, too. Then, to have allusion made to the Nesmith family-matters was a source of dissatisfaction. Hadn't Mrs. N. tired her patience by her constant impossible and unprofitable suggestions about "improved housework?" So Jane let her spirit rise gently.

"Perhaps Mr. Nesmith has judgment enough to select a stove that won't wear out as fast as ours."

John started. It was the first time he had been spoken to by Jane in just that way. For the moment his lips were dumb.

"Mrs. Nesmith's stove," continued Jane, "has been in use longer than ours, and there is not a crack or bend in it."

John said something about "speaking in just that way," and Jane retorted something about "complaining at what couldn't be helped." The domestic hearth was not a happy one that night; the little incident of that evening didn't conduce to family bliss for some time to come. But John was not an altogether inconsiderate husband, as Jane was nothing less than a considerate wife, and they concluded to try a new stove, a first-class one, and nothing poorer.

John and Jane were still young when a number of years of married life had passed away. But there was an appearance of age about them, and their years might have been nominally increased, and no one detected the

error. They looked like over-worn, premature aged persons. There was also an expression of discontent on their faces. All things had not been peaceful. They had had one new stove, and then another, but still they consumed as much fuel as ever. John had also mentioned that they demanded a remarkably frequent renewal of clothing. Jane remembered what Mrs. Nesmith said about washing clothes out, and was impatient. But they were not quarrelsome partners in life. No, no; they were as devoted, industrious, and saving as ever.

At length the second baby arrived. It was not as strong and healthy as the first. People called it precocious. It was more properly premature. It had an old, experienced cast of countenance. You could almost imagine you could trace the lines of age and care upon its little features. Then it cried a good deal, and seemed to be unreasonably irritable, if such a thing could be charged upon a young infant. Then it would be sicklier than usual every now and then, and the old doctor would have to be called. It generally fretted days and worried nights. Its care greatly increased the family burdens. John worried and wearied more over his daily work, and Jane's step was heavier and her hand slower. Her dinner-pot boiled both high and low, and the pies were liable to be over-done or under-done, as the case happened. Scrubbing was kept up, however, as well as might be, and clothes wore out rapidly. Worse than all, the doctor's bill came in almost as a regularity; for, beside the accidental complaints of measles, mumps, etc., of the children, Jane would have pains in her back, and sickness, sometimes keeping her bed for a day or two. John was also troubled with rheumatic symptoms, and kept his panacea always on the shelf. It was hard work saving much, and John and Jane both worried over their hard lot, and sometimes, in fits of irritation, they complained of, or to, each other, or accused each other. All these things made life more burdensome and the family cloud more portentous; yet John and Jane were not quarrelsome. They were generally known only as peaceable, industrious, and economical people.

The culminating point arrives at last, the climax is reached. John came home one

night more tired than usual. He wanted supper, and then to meet a committee on building a large edifice. He hoped to make a profitable contract. But supper was not ready, and Jane was on her bed. She had been seized with one of her ill turns, and had been obliged to abandon the conduct of the house to the children, who were doing anything but hastening the evening meal. Her head ached, her back ached, she was painfully ill. John swallowed a cold mouthful, ran for Mrs. Nesmith, called at the old doctor's door, and proceeded to meet the committee.

When John left the committee for home, his contract hung on an uncertain contingency. Arrived at his house he was surprised to see Mrs. N. and the old doctor both still there. Mrs. N. looked calmly mysterious, and the doctor said, "This is serious business."

"What is it?" inquired John.

"Your wife has a very serious attack," replied the doctor.

"Can't you break it up?"

"I fear not. She is very much worn and exhausted. I dare not use any but patient, gentle means. I am afraid your wife has a hard road before her, though with the best of care I hope she will be able to weather the storm. I have given Mrs. Nesmith, who has kindly consented to stay, the directions necessary for to-night. I will come over again in the morning."

John didn't get his contract. It was just as well. Jane lay on her bed four long and weary weeks, and then sat up. It was some time longer before she did her work, but the house managed to keep along after the fashion. Good Mrs. Nesmith was almost unremitting in her neighborly attention and sympathetic nursing. John couldn't help thinking, once or twice, there was a difference in housekeepers; Mrs. N. had a much easier way of doing things than Jane had. At last things got formally righted again. Jane got upon her feet and assumed control of family affairs. She wasn't quite as strong as before her sickness, but she was just as industrious, economical, and saving as ever.

The time soon came when John and Jane were called upon to pass through one of the most discouraging ordeals that could ordina-

rily afflict them. They had to make a draft upon their deposits. John took an installment of their hard savings and turned over scores of dollars to the old doctor, whose attentions had been of late so assiduous and successful. There was some back pay among the rest, and the whole told up in a round sum that makes the head a family in common circumstances look thoughtful. It was with a deep sigh that John told the amount in clear cash upon the old physician's table.

"Things have gone rather hard with me of late," said John.

The old doctor rolled up the pile of bank bills and put it in a safe place before he essayed to reply; just as if he thought it best to secure the cash before he said something that might not be so fully appreciated.

"Surely," he returned, "it's a great trouble to have sickness in the family."

"Well," continued John, half pettishly, "I think the world don't give the poor much show. The hard worked man has the pain of his labor and loses his earnings besides."

"John," said the doctor, and he put up his under lip just as he did when he was about to prescribe for a serious case, "there is one trouble with you that isn't properly accounted for."

"What is that?"

"You haven't learned how to economize."

John was thunderstruck. At first he felt offended, and then he felt grieved. To think that after all his labor and care he should be judged an improvident man was too much for his generally even emotions. The doctor saw his mental situation, and proceeded to help him out of his embarrassed condition.

"When I was called that evening to see your wife, I found what I had been for some time anticipating. The time had come when there must be compensation for undue waste. Understand me now. I am not speaking of money. You have been very diligent in saving that, but you and she have been wasting your bone, muscle, and nerve—your life, in short. That is what has caused all your wife's sickness as well as your own."

"But how is a man going to live and support his family unless he works? Tell me that, sir, if you can."

"The fact is, John, there is more than one thing to be considered in true economy. It

is one thing to save money, another to save time, another to save strength, another to save material, and so on indefinitely."

"But that don't answer my question. How am I to live unless I work and save my money?"

"John, I have been in your house a good many times the past year or two. I have observed your domestic circumstances quite thoroughly. Now, for one thing, I have noticed a hole in your stove."

"Yes, and that's the third or fourth stove I have had to buy within a few years, because of my bad luck in getting poor ones."

"I don't know about that. You burn green wood, don't you?"

"Partly—because it's cheaper."

"How much do you save on a cord of wood by taking it green?"

"Two dollars."

"How many cords of this green wood do you buy in a year?"

"About six."

"On six cords of wood you save twelve dollars. Is that enough to buy a new stove?"

"No."

"Just so; and a stove that burns green wood isn't fit to be used with economy in less than a year's time. And this isn't all. How much does a good washing-machine and wringer cost?"

"From twelve to fifteen dollars for the best."

"Have you paid any more than that for lame backs and arms, to say nothing of your wife's last sickness?"

John sat silent; but he remembered that first attack of rheumatism after he had helped out the washing after a hard day's work at the bench. He also reflected how Jane's attacks came on Tuesdays frequently.

"A penny saved," continued the doctor, "is as good as a penny earned; but a penny properly laid out is as good as two pennies earned. Dry wood, a washer and wringer, and some other labor-savers, would have kept the principal part of your sickness from the door. You see the rock on which you have split, and you see where you may look to realize an easier world."

John went out of the doctor's office a wiser if not a sadder man. The next day he ordered a new stove, a washer and wringer.

Passing along the street he met Farmer Birch.

"Wood-pile most out?" inquired Farmer Birch.

"I guess I want a load of dry wood, if you can bring it soon."

"Will fetch it into the street to-morrow, if ye say so."

"All right! Old price for dry?"

"Same."

"Fetch it dry."

John made his way to Neighbor Nesmith's—not to see Neighbor Nesmith himself, oh, no! so he didn't inquire for him.

"Mrs. Nesmith, we are under the greatest obligations to you for your kind assistance during Jane's sickness. I feel we can never repay you."

"You have said as much before," said Mrs. N.

John sat a moment.

"I want to ask you a question, Mrs. Nesmith."

"Well?"

"How do you manage to do housework so easily?"

Mrs. N. didn't look surprised at all. John felt easier for that.

"I suppose it must be because I practice the science of housekeeping," said Mrs. N.

"How?" interrupted John.

"It would take some time to tell that," said Mrs. N., "if I give all the particulars; but, to give a short answer, I have learned to make the most of every circumstance."

"To make the most of every circumstance," thought John; then suggested—

"Don't we all try to do that?"

"It may be, but in different ways sometimes. I can't tell you all about my ways, but I have had great help from reading the experiences of others who are engaged in the same work. The *Weekly Housekeeper* has aided me not a little. It has taught me how to economize time, strength, and substance. In fact, I shouldn't know how to get on without it."

John borrowed several numbers of the *Housekeeper*. Jane and he read them. Then he borrowed some more. Finally, he began to think there were some facts about domestic affairs that could be learned from it, and he concluded to subscribe for six months.

Six months passed, and then he wasn't tired of it. More than this, he read the advertisement of the "Mechanic's Guide," and concluded he should like to own it. Then Jane saw a notice of the "Economical Cook," and wanted it. In a short time no less than ten dollars went for a paper and books. Then with the new stove, the washer, the wringer, the dry wood, the *Weekly Housekeeper*, the "Mechanic's Guide," and the "Economical Cook," housekeeping was as cheap and easier than before. The pot didn't boil over, and the pies were not scorched. Nor were John and Jane as tired at the week's end; the "Mechanic's Guide" told John how unwise and unprofitable it was to try to do and be everything at once, and pay nobody for an odd job.

At the end of three years after this change, John met the old doctor and "confessed" as he called it. After relating his "experience" with satisfaction and pride, in which his listener heartily abetted him, the old physician, with a sly twink of his eye, inquired:

"Have you laid up any money lately?"

"Bless you, yes! I am doing better than I did in three previous years."

"And how much have you paid for sickness?"

"Why, you know; I have called no one else these three years. The children have needed a little attention, and Jane had that attack after being called out in the night to nurse Mrs. Patchen."

"Did I cure her any quicker than I did before?"

"I should think you did; she was about the house again in a few days."

"It makes a difference, then, whether you save capital for emergencies, don't it?"

"I guess so."

"That's all," said the old doctor.

"COME HOME EARLY."—Simple words, yet what a world of meaning they contain! Lips which are white and still enough now have whispered them some day, while hopeless, living lips still murmur them forth to unheeding ears. Joy and anticipation breathe them alike, while despair forces them from aching hearts, which are almost numb in their mighty sorrow, and yet they are daily whispered in some ears—and oh! heed them well!

"Come home early!" a dear form waits for you, and the minutes seem like hours, and the hours will grow to be days in your absence, and the trusting, patient heart will grow weary, and the bright eyes dim with waiting. Then

come home early. Come while love waits to greet you, and fond lips to bless you. Yes, come in from the life-battle without, purer for the great love which is yours, and the dear lips which murmur so tenderly in your ears, "Come home early!"

MRS. WILKINSON.

A NEW AMERICAN SCULPTOR.

WHETHER painting or sculpture be the higher art, opinions may differ. Michael Angelo was great in both—nay, not a painter



MRS. CAROLINE S. BROOKS.

and a sculptor merely, he was also a designer and an architect. A well-educated, developed, and "full-orbed" mind, can do almost anything within the realms of human effort. But we are now to speak of the subject who has occasioned these remarks—Mrs. Caroline S. Brooks, whose likeness is given, and also the specimen of her work, in an engraving from a photographic copy. Her work, which has the peculiarity of having been done in butter, has been pronounced "excellent" by many competent judges of the West. Her own face is a fine piece of *mental* sculpture, showing fine workmanship in soul-culture. She is greater than her work or her art, as the creator is greater than that which is created.

Mrs. Brooks' personal history is interesting. She was born in Cincinnati, in 1841, well educated, and married in 1863 to a planter, and they lived in Mississippi and Tennessee before moving to Arkansas. She knew nothing of art,

nor of text-books on the subject. When eight years old she tried to make a copy of Dante from a book-cover in clay, but failed. After her marriage she made imitations of shells and fish in butter, with the manufacture of which she is familiar; and when her husband died with the yellow fever last year, she made a beautiful figure in his memory, representing a child, and it attracted much attention. Then she devoted her leisure to producing her ideal face of "The Dreaming Iolanthe," the subject of a Danish poem, which she had read in her youth. The artist represents her as she lies, sleeping with the enchantment of dreams playing upon her face.

The work is wrought in a pan of butter—and butter is considered far more difficult to use, in an artistic sense, than clay. Still, when the image was exhibited at the Cincinnati and St. Louis Art Galleries, the enthusiasm of the critics amounted to almost an ovation, and Mrs. Brooks was immediately called to Cincinnati. Her home is nine miles from Helena, Ark. Her work was done with a butter-ladle, broom-straws, sticks, and a camel's-hair brush—tools of the simplest description.



THE DREAMING IOLANTHE.

Why have we so few sculptors? Indeed, why should not every boy and every girl learn to model? Clay and water are cheap and plen-

tiful, and so are plaster of paris and marble, while the necessary tools are few and simple. Little girls may work in dough, and model what they like. Heads of horses, cats, or dogs, offer common suggestions; or they may mold rabbits, rats, or robins, anything for practice. Little children make mud-pies, and that is a kind of modeling. A little assistance,

encouragement, and instruction, would make sculptors and artists of all well-made children, and such an art would afford pleasurable entertainment and no little instruction, though one pursued another vocation for self-support. Reader, why not make it a point to furnish materials for at least one happy child, and put it in the way of becoming something of an artist?

A FACE AND ITS IMPRESSIONS.

IS physiognomy a *natural* science? If not, why then do we seek to read in a face seen for the first time a knowledge of the character to which it belongs? Facts contain the true replies—incidents illustrate. A few of these may interest.

First, it is well known that there are persons who, whether thus gifted by nature or taught by experience, have a faculty of judging the characters around them from the first reading of their faces. They are seldom if ever deceived; their pronouncings seem prophetic, and time brings proof of their wisdom.

The cars were rolling along the "Grand Trunk Line" in Canada, and at one of the stations a small lady entered alone. She glanced over and around the passengers, who were not very numerous, and then became absorbed in the scenery outside. She had previously noticed far down the other side two ladies, evidently mother and daughter. Both seemed weary and restless. While engaged in looking at the blue waters of Burlington Bay, the elderly lady approached her seat and pleasantly inquired, "Would you object to my sitting with you awhile?" "Certainly not," was the courteous reply, and the two ladies looked in each other's faces, as if to know was to love.

"I am so weary!" said the elder. "I have been traveling two days and a night, and have yet to reach Boston. There is no one on the cars I know, and yours is the first face which made me want to speak to it." The small lady's modesty was evidently conscious, but she said, "Thank you," and a friendly conversation was opened. The elder lady was the wife of one of the merchant princes of Boston; the other a daughter of adversity, and endeavoring by her exertions in

traveling to raise needed funds. Her pale, earnest face was very thoughtful, and the rich lady soon became interested. The talk grew familiar as that of old friends, and when, in a few hours, the pale traveler reached her destination, both were loth to part. The farewell hand-clasp contained that which would be a comfort for many days, and each will long remember that meeting in the Queen's dominions.

The small woman's journey was extended through several months, and everywhere her face seemed to herald a welcome. She was not pretty. What was it? Said one, "Her face is so intellectual—so thoughtful." Said another, "Through the long train of years the *winsome, earnest* face of —, is the first which memory recalls." Said another, a stranger with whom the traveler tarried a brief time, "I do not want to flatter you, but indeed I think you have a *very* good face. I would like to have you with me always." Application for a room at a hotel and board was responded to by the proprietor, "We have not many ladies here, but your appearance is sufficient;" and one of the best rooms was awarded her while she remained, and all requisite attentions paid with respect.

Further on our traveler took passage on a magnificent steamer bound southward. She had been detained among strangers many hours without food, was exhausted and weary. There were several ladies in her part of the cabin, and one came and offered refreshments, which were very thankfully received. Not long after the same lady said, "I want to leave my door open to admit the warm air, and I am going to the upper cabin to walk; will you have an eye to my room and my things while I am gone?" "Certainly." The lady went—was absent about half an

hour. Chambermaids were going back and forth and ladies coming and going, but the traveler sat still on guard. The lady returned, smilingly remarked, "It is too cold up-stairs," and went to her room. After a time she returned to chat with the lone one. On rising she placed a bank-note in the hand of the weary one, saying, "It is but a trifle; I wish I had more; but it will help you a little."

And so it was to the end of the journey. That face, all unconscious of the story it was telling, made friends for the lone woman everywhere. Purity and truth can not but win. Alas for the dark faces which tell of sin and deeds hidden by a wrapping of smiles and brazen eyes!

"I have brought you some help," remarked Mr. — to his wife, entering with a stout-looking man whom he had hired to see to the grounds while he was absent. Jump went the woman's heart. What was in that face? The man was clean, civil, and tried to be friendly. Finding the lady would not "be sociable," he drew back with a look which she said she never thought of but it

seemed as if a dagger entered her heart. At the first opportunity she said to her husband, "Take that man away; I do not like his looks. I am afraid of him, and would rather be alone." "Oh, he is just a rough working-man; he can't do any harm, and I have engaged him." He staid—and oh, the trouble, the fears, the heart-sorrows, the disgraces, that unheeded warning gave to a family whose history previously was peace!

Two men entered a house desiring business with the head of the family. One was strikingly different from the other. The wife looked at them—at one with fear and terror, at the other with loathing and contempt—and gave a sign to her husband, and they went aside. "Have nothing to do with them; you will get into trouble, for just look at their faces!" "Oh, they can't help their looks; they are just on business. You are too suspicious." So it proved again that a woman could read the soul's character so plainly written for her, but dim to the man who mingled daily with crowds. He lived to see life-long trouble with those two, who proved the bitterest enemies. E. S. CUSTAR.

MRS. BELLA FRENCH,

A WESTERN AUTHOR, POET, AND PUBLISHER.

AMONG women of undaunted spirit we rarely meet with one who has suffered, endured, and struggled more than she has whose name heads this article. Her name is not unfamiliar to the readers of the PHRENOLOGICAL JOURNAL, as she has found the time to contribute occasionally to its columns. Her photograph was submitted to us a while ago, and of it we predicated a phrenological delineation of which the following is a *résumé*.

This lady has inherited her father's love of liberty, sense of independence, desire for knowledge, and something of his energy, enterprise, and push, while she has also her mother's sensitiveness, watchfulness, solicitude, sympathy, and affection. She should be known for her powers of observation, quickness of perception, and clear intuitions. She has somewhat of a prophetic nature, often foreseeing what is likely to occur. She

is impressed from above and beyond, and can not always give a reason for her impressions because of their psychological character. She has high aspirations and great ambition to excel; can not endure restraint or permit herself to remain subordinate to the will of others. She would be free as the birds. Together with a clear, sharp intellect she combines a vivid imagination, and so lives much in the ideal, there finding highest enjoyment. She is not disposed to consider sharply the uses of money; her economy has no sordid grains in it, and in her dealings with others she usually gives more in money and service than she gets in return. She is very fond of variety, but at the same time persevering in what she undertakes, a forlorn hope often quickening her energies and prolonging her exertions. She is high principled, aims to do right, is strong in hope, and to have a word of encouragement for others,

generally forgetting personal troubles in contemplating those of others. She readily forms strong attachments, her nature craving companionship, but she is unwilling to submit to any mastership from any one; entire equality must be observed. She has deep religious convictions, however, and feels her accountability to her Maker with more than the average seriousness. She is fond of music and art and esthetic life generally; would

Georgia in the latter part of the year 1838. Her parents were English, and she was the third of seven children. Her father, whose mind ran entirely toward machinery, spent quite a fortune and nearly beggared his family by trying to give to the world a mill-power that would require only the strength of one horse for operation. He partially succeeded, but was struck down by disease when his prospects were the brightest. Bella, even



MRS. BELLA FRENCH.

doubtless have excelled in some department like sculpture or painting. In literature she would find an agreeable sphere and probably win good reputation, as she is endowed with the faculties contributing to grace and fluency of language. She seems to us, all things considered, well qualified to make her own way in the world. Less sensitiveness, less ambition, more economy, would be likely to promote her aims.

Bella French was born in the State of

in her infancy, was dubbed "queer." Before she was five years old she drew as much as possible from the society of other children, seeking retired places, where she played at making books; and these she filled in imagination with stories and rhymes about the people of the dreamland in which she lived. Her dream-life was a beautiful one; and even when so very young she shrank from a contact with the real world, which somehow rudely jarred her nerves. A traveling phre-

nologist, who chanced to see her when she was about eight years old, in answer to the inquiry of her mother whether the girl would ever be good for anything, said: "Madam, that child is a genius—a poet of which America will one day be proud, if she lives." The parents only laughed, and, whether he was a charlatan or not, the little girl treasured his words, and they became the guiding-star of her whole after life, never forgotten in all the sickness, distress, and poverty that subsequently were hers. Her first effusion, bordering on poetry, was written at this time for a school composition. We give it here, *verbatim et literatim*:

SPRING.

I

Spring is the pertiest seson of the yere
our winter is gone that wos so drere
and flize air begining to appear
and the Grass is Sprouting every where.

II

the flowers air very nice and Swete
the Boys air playing in the strete
And gurls can wonce more have bear feat
which is comfortable if not so neet

III

the flag is flyen from the Cort House stepel
saying Hurraw to awl the peepel.
The birds air saying funy wurd
and i am Hapy as wel as the birds

IV

our old boss is Giving nice yeller milk
And Caffey's hare is soft as silk
the Roosters air kackling in the barn
and awl the gurls air spining strete yarn.

V

it Is awl because the son is so warm
and Winter can do us no more harm
spring makes every thing nearly crazy
Cepting folks and tha git lazy.

VI

My Teacher says there is anuther spring
And that won death will surly bring
and the gurl that reads the bible and prays
will have It won of these days.

But Bella did not long attend school. There was always a baby at home needing care, and the mother never could find a time when she could spare her oldest girl, for such Bella was. The father spent all of his time and money in trying to illustrate his darling theory, and the mother was an invalid; help could not be hired, and the child was put very early to household drudgery. She was deprived of her father at the age of thirteen.

His loss placed the family in destitute circumstances. Then followed years of privation and woe. The mother and daughter toiled in a St. Louis garret (the family had been residing in that city for some years) to keep themselves and the little ones from death by starvation. It was before the era of sewing-machines, and the pair earned their scanty living by hand-sewing. The family was at last obliged to break up, and Bella drifted north as far as the State of Iowa. But there was no let-up to the storm that swept about her young life—no hand extended to raise her. She toiled at various kinds of menial labor until she was enabled to attend school and lay the foundation for the education which she afterward acquired by night-study. She first appeared as an author, about fifteen years since, in the columns of a New York weekly miscellany and some other eastern publications. A large portion of the nights of the next eight years (she was obliged to do other work in the daytime) was spent in writing and study. "Brick" Pomeroy was the first to appreciate fully her ability. He gave her a situation in his office, and allowed her to supply the literary department of his flourishing paper. She held the place for a year, when sickness compelled her to relinquish it. But she had learned a great deal in the office outside of the routine of her duties. In odd hours she had acquired some knowledge of type-setting, etc., that afterward proved of great use to her. Pomeroy, in his New York *Democrat*, said of her a little over a year ago:

"Bella French is a woman—a remarkable woman. We met her years ago a poor working woman, deep in the garden of thorns and bitter prospects. With a heart for any fate she studied—she wrote—she suffered—she worked—she waited—she *conquered*. Some of the most charming articles have come from her pen. She has written more than T. S. Arthur, and generally better. If ever a woman in this country deserved success and the support of all who would help deserving industry, the editress of *The Busy West* is that person."

The year following the leaving of Mr. Pomeroy's office Bella French spent in writing for periodicals. At the end of that time she started a paper at Brownsville, Minnesota,

which she called the *Western Progress*. Here, under the tuition of an able foreman, she perfected herself in the art of printing. So fully did she acquire this art, that on being deprived of male help for over six weeks she published her paper, a large twenty-seven column weekly, and attended to the job work of the office, with no other assistance than that given by two young girls. After publishing the *Western Progress* for three years she sold it to take a position on the editorial staff of the *St. Paul Pioneer*. Subsequently she accepted an offer made by a gentleman from the East, to join him in the publication of a magazine at St. Paul; but, after the prospectus had been published, he grew frightened at the gigantic appearance of his own enterprise, and "backed out." Her capital was very limited, and it seemed madness for her to undertake the magazine alone; but she did. She fitted up a small office and went to work, putting her whole soul into the enterprise. Not being able to secure the proper amount of help, she not only performed the editorial labor, but with no assistance except that given by a very young girl did the entire work of composing, imposing, proof-reading, binding, and mailing, beside keeping her books and doing her collecting and canvassing. The magazine at the end of a year was sold and consolidated with another; but during the time it lived it acquired a fame almost unprecedented, considering the small amount of labor used in getting it before the public. Its history is one of weary days and sleepless nights, and of a woman's untiring energy.

Bella French has appeared successfully on the rostrum several times of late years. She

designs taking the lecture field during the coming season. Her new lecture, entitled "Who is to Blame?" endeavors to point out the causes of sin and crime and their prevention on scientific principles, and it is something that all ought to hear.

The subject of this sketch is at present at work at La Crosse, Wisconsin, preparing a new publication, entitled, "The American Sketch Book." It can not properly be called a magazine. It is to be a work published in a series of numbers, each number containing about forty pages of reading matter, twelve numbers constituting a volume. It will be the aim of the publishers to make an average issue of one number per month. The first half, or more, of each number of the Sketch Book will be devoted to the description, history, advantages, and business of some city or town, illustrated with a frontispiece engraving of a view of the whole or portion of the place described. The remaining pages will be filled with choice literary matter, comicalities, and so forth. Each number will be complete in itself.

To assist the work, if the necessary arrangements are made, Mrs. French will deliver one or two lectures in any town interested, and will use the proceeds, exclusive of her traveling expenses, in obtaining engravings of views of said place: the engravings to belong to the town after use.

It is a novel undertaking, and if carried out will be a valuable one for the places so illustrated.

It is impossible, in the short space allotted, to give more than a glance at the eventful life of this author. It is one of great struggles and temptations, and of rarely met perseverance.

A SUNDAY EVENING IN WATER STREET.

EVERY effort put forth for the elevation of the slaves of debasing habit is deserving of the sympathy and support of the philanthropist and the Christian; and it will gladden the hearts of thousands in every part of this land to know that the missions established in New York city with the view to reaching the most degraded of the masses, are doing a mighty work. The record, brief and unvarnished, of a few hours spent

in the mission room "Helping Hand," in Water Street, will indicate the blessed influence exercised by such institutions, which are, in many parts of the city, really centers of light and ports of refuge to the passion-tossed sinner.

At half-past two one Sunday afternoon I reached Water Street. Rum-shops and lager beer saloons were in full blast, and other agencies of evil were not idle. Assuredly

there is much that is God-dishonoring and man debasing in the Fourth Ward; but it is gratifying to know that good men and women have established mission rooms in Water Street, and that the services are generally well attended by those for whose benefit they were established.

As I walked Water Street my attention was arrested by the sound of music arising from the mission-room "Helping Hand." I enter, and am courteously shown to a seat. There is an attentive, if not a large congregation. After singing the hymn:

"Rock of ages, cleft for me,
Let me hide myself in thee,"

a suitable address—full of point and power—is delivered. Prayer is then engaged in, and more singing follows. By the way, there is a good harmonium, which is admirably played.

Several persons then offered up prayer, and this introduced a most interesting feature of these meetings, the simple testimony of the people to the marvelous change which has taken place in their mode of life.

No. 1 thanked God that he ever entered the "Helping Hand." "When I first came here," said the speaker, "I was a poor, degraded drunkard, without a coat on my back or a cent in my pocket. Not a man in Water Street would have trusted me five cents. I used to go bumming about the rum-holes, begging for rum. Thank God, I am now a sober man; I've three coats; and I could put my hand on \$300. That's what religion has done for me."

No. 2 said: "I used to be so fond of rum that I've often sold my clothes to get it; and when I had no coat to sell, I would beg rum. Thank God, I have given up both rum and tobacco. The 'Helping Hand' has been a blessing to me."

No. 3 gave a thrilling account of his degraded condition when he first was induced to attend a meeting in the "Helping Hand." "Rum," said he, "had ruined me. I was almost lost; but I have been saved from the grog-shop, and I'm now a happy man."

No. 4 (evidently an intelligent artisan), spoke of the spiritual benefit he had received by attending the meetings in the "Helping Hand."

No. 5 said: "I'm a sailor, and I used to be

a great drunkard. So fond was I of grog that I would have sold the coat off my back for it. Since I began to come to the 'Helping Hand' I have given up rum and tobacco. I'm now a changed man."

Nos. 6, 7, and 8 were women, and they testified that religious ways are ways of pleasantness.

At intervals there was appropriate singing, and the people seem to appreciate very much such hymns as "Happy Day," "There is a fountain," etc. The missionary made a powerful appeal to those who were without religion, and urged the importance of deciding for Christ. Several individuals declared their intention, with God's help, to lead a new life.

At five there was an adjournment for an hour and a-half.

When I reached the "Helping Hand" at half-past six o'clock, I found the room filled to its utmost capacity. A few individuals from "up-town" were present, and seemed to take the greatest interest in the proceedings. After reading the Scriptures and prayer, the giving of testimony was resumed.

No. 9 said: "I used to lead a very bad life. I had gone down very low; but I received a 'Helping Hand,' and now, thank God, I'm a sober man."

No. 10, with tears in his eyes, said, when he first entered Water Street (the mission room), he was "filthy inside and outside." "I was," said he, "turned out of my father's house for my bad conduct. I came to New York, where I went from bad to worse, for the downward course is easy. When I came into the Helping Hand the first time I was without a coat, and I had not a cent in the world. The truth reached my conscience; I am a changed man, and I have been reconciled to my parents. For the first time, I yesterday had a letter from my mother. Thank God for that mother's prayers. They have been answered in my conversion."

No. 11 (a foreign sailor) said he entered the "Helping Hand" thinking it was a dance-room; "but," said he, "when I saw the name of Jesus here (pointing to the wall) I found I had made a mistake, and I said to my comrade, we are in for it now. We must pray instead of dance. I began to pray, and, thanks be to God, I have been

able to give up both rum and tobacco. I ask your prayers, that I may be faithful."

No. 12 said: "The 'Helping Hand' has saved me from being a loafer and a thief. I am sorry to confess that I was a loafer, and that I could steal before the very eyes of my employers. I used to go to 'hops,' and to all places of vice; but from all I have been saved, thank God."

No. 13 (a sea captain) spoke feelingly of his mother's prayers, and of his own happiness as a religious man. He thanked God for what he had heard that night, and prayed that the good work might go on.

No. 14 (a woman) said when she first came to the "Helping Hand," she was in darkness, but that her eyes had been opened. She asked the meeting to pray for her husband.

No. 15: "I used to be a slave to rum, but, thank God, I have conquered the fiend. I have also given up tobacco. Pray for me."

Here a young girl, about eighteen years of age, engaged in prayer.

No. 16 (a woman) told that she had given her father "many a sore heart;" but she would never vex him again. She had believed in Jesus, and was walking in the "narrow way."

No. 17 (a little girl), with sobs, asked the meeting to pray for her mother, who, it was stated, is a drunkard.

No. 18 (a young lady from "up town") said she had come there to learn something about Jesus, as she felt she did not love him near enough. She hoped the people would not be backward because a few "up-town"

folk had dropped in to see how they were getting on.

No. 19 (a German) blessed God for a religion that made him happy. Hallelujah!

No. 20 said: "Last week was the hardest I ever encountered. Going to my office one morning, I did not know what to do; things were all in a mess. I left my office, crossed the river, and stepped on a train car to go—I did not know where. As I sat on the car I thought—I am pursuing an unmanly course, flying from my difficulties. I will return to the post of duty. I entered my office, locked the door, got on my knees, and gave my heart to Jesus. I asked him to bear my burden, and at once I felt relief; the darkness and doubt were gone. Now my mind is in perfect peace."

No. 21 (a poor toiler) said he had left the Lord's service. He was sorry for his backsliding, and he hoped God would forgive him.

The missionary, who seems "the right man in the right place," pressed all to accept of offered salvation, and asked those who were disposed to enter the service of Christ to stand up. Several rose to their feet, and prayer was specially offered up on their behalf. Three or four subsequently professed to have found peace.

About nine o'clock the interesting meeting was brought to a close. All that we saw and heard during the evening convinced us that a very beneficial work is being carried on in connection with the mission "Helping Hand" in Water Street.

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

THE SILK TRADE IN AMERICA.

AMONG all our great industries, none have grown more rapidly than this. If there be no adverse legislation, it will not be long before we shall lead the world in what has heretofore been deemed a foreign specialty, the manufacture of silk goods. We must aim to export silks, and so compete with Europe in this business. Here is a very

interesting survey of the rise and progress of the silk trade in America from the *New York Times*:

A THRIVING INDUSTRY—STATISTICS OF PRODUCTION.—Almost foremost among the progressive manufacturing industries of America is the silk trade. It has grown out of small beginnings, has had innumerable

struggles and vicissitudes, has reached a tolerably mature prosperity, and is still advancing. It is unnecessary here to go into a remote and almost mythical antiquity for the early history of silk manufacture, or to hunt up those antique Chinese annals wherein we are told that an emperor, with the customary style of Celestial nomenclature, invented a musical instrument, in the manufacture of which he employed fibers extracted from cocoons, made by a large species of green worm, and that the filaments, thus used for the first time, came under the denomination of silk. Neither is it of importance to know how, something approximating to a thousand years later, an empress of the same Oriental region devised certain silk tissues, which procured, after her death, her recognition as one of the Chinese divinities. People now-a-days are not much concerned with those seeming fictions. They do not look so far back for the beginning of that which is now an accomplished fact, and are rather disposed to seek in more modern times for the developments of an article of production and manufacture which the more recent enterprise of America has nurtured and improved, thus bringing the silk manufactures of this country not merely to a par with, but even to a higher degree of excellence than, the products of the first looms of Europe. If one were to go back a little, it would be doubtless infinitely more interesting to know that there was a comparatively early manufacture of silk in Rhode Island. It occurred some time before the year 1800, a period far back enough to have quite a classical respectability in our comparatively new history. It appears that in those days a young lady, who lived at Union Village, now North Smithfield, of that New England State, got married, as is the custom of many young ladies. The quantity and value of her wedding presents are not recorded, but it is stated, with some circumstance, that she wore a dress entirely of her own make. It appears that she tended the silk-worms, reeled the silk from the cocoons, spun it, colored it, wove it, and made the dress. It was stated at the time to be the first piece of silk manufactured in the country, and its character was described as what would now come under the denomination of excellent. It would be an interesting

supplement to the story to know that the then young lady was now a respectable centenarian, and still capable of understanding the progress which has been made in the special branch of manufacture, which, if for no other reason than to keep up the interest of the tale, we will give her the credit of having inaugurated. It may, however, be fairly presumed that she has by this time been gathered to her fathers, and that in her case there is some tangible ground for the poetic truism that "the individual withers, and the world is more and more." At all events, the production and manufacture of silk in America have progressed with splendid results since the time of the Rhode Island wedding, until now it forms one of the principal elements in the statistics bearing upon the imports and exports of the country. It is not the intention here to refer to the progress of silk manufacture in France, or to do more than allude to the great start which the English made in the way of improving their machinery when a finely-skilled mechanic, named John Lombe, visited Italy and brought home ideas which were speedily reduced to practice by the prompt enterprise and energetic spirit of the English manufacturers. Our purpose is rather to deal with the production and manufacture of silk which have grown up within the United States. Silk manufacturing, in the accepted sense of the term, in this country, began somewhere about the year 1860. It can scarcely be said to have had an earlier origin, although so far back as 1829 a little raw silk from China was in use. This was, however, inconsiderable, for so late as 1859 the value of the raw silk imported was set down at \$104,000. Of course, in those days imported manufactured silk met the demands of consumers. Since the home manufacture of silk got a firm footing, the importation of the article has fallen off, and in the nine months completed of 1873 the importations of silk have been much less than in the corresponding nine months of 1871 and 1872. For instance, in 1871 the quantity of imported silk entered for consumption amounted in value to \$23,884,153, and for warehousing \$6,760,233, giving a total of \$30,644,386. In 1872 the total was \$31,012,608, and for the corresponding months of this year it is reduced to \$22,761,-

818, or \$7,882,568 less than 1871, and \$8,250,790 less than in 1872. The total dry-goods imports for 1873 of wool, cotton, flax, silk, and those coming under the denomination miscellaneous, are \$10,977,996 less than in 1871, and \$19,558,210 less than in 1872. It will be thus seen that the decrease of silk importations represents one-third of the decrease in the entire dry-goods importations. Now, with this falling off in imports of silk, the looms of the country are at work and the demands of consumers are steadily met, while there is at the same time the irresistible argument in favor of the silk manufactures of America, that there is no increased cost to the consumer. The silk trade of America is, in truth, at present an established fact, young no doubt as to the period of its existence, but progressive, and with vast scope for future development. It has struggled triumphantly through the early vicissitudes that attend large undertakings, and is now established upon a basis which should be the more permanent as it has been formed by gradual and, therefore, enduring processes. Within the past ten years it has quadrupled itself. It now gives employment to more hands than the silk trade of France, and has shown a progress which passes beyond that of England or any of the other European countries. An important agent in guiding its progress is the Silk Association of America, which has its offices at Duane Street, in this city, and which held its first annual meeting in last May. The present aim of the society is to present the current importations of raw silk at New York and San Francisco, forming the chief supplies of American manufactures of silk, and, as against this on the other side, to show by detailed items of imported fabrics the quantity and value of silk merchandise used by the people over and above the amount produced in American factories, thus illustrating to the manufacturer the extent and value of the demand open to him, and the supply from other sources with which he is in competition. It has in active membership sixty-five firms and manufacturing corporations, which are largely representative of the modern history of the silk trade in America. Of course the question of protective duties applies with a great deal of force to the silk trade, and is made the subject of much dis-

cussion in connection with it. Senator Boutwell's recognition of the necessity of protective laws in his lecture on finance, delivered in this city, with respect to the shipping interests of America, which laws, he says, were first forced upon the country by the necessities of the war, have, it is argued, an equal application to the manufacture of silk in America, and very cogent reasonings in this direction are supplied in a recently-published letter of the Secretary of the Silk Association, in reply to some of the adverse arguments of the champions of free-trade interests. While he passes over the vexed question as to the relative merits of free-trade and protection, so far as they practically advantage the mass of the people, he brings forward the statement that in the year ending December, 1872, although admittedly a year in which, from special causes, the silk manufacture in America did not reach the maximum results of the year previous, there were produced silk goods aggregating in value \$25,073,201, the product of \$15,316,414 invested as capital by 147 establishments in the States of New York, New Jersey, Pennsylvania, Maryland, Connecticut, Massachusetts, New Hampshire, and Vermont, where there are employed 11,713 operatives, receiving as the wages of their labor \$4,878,054. He confines himself to these States, he says, simply because he has proof at hand of the correctness of his figures. Considering these statistics in their true bearing, in comparison with the inconsiderable attempt at silk manufacture, especially silk weaving, ten or twelve years ago, he discovers what rightly appear to be gratifying indications of the possibilities and probabilities of this branch of American textile industry.

A NEW AND GREAT ENTERPRISE.—The *Inter-Ocean*, of Chicago, of a late date, says:

"Mr. H. H. Hall, the United States Consul at Sydney, Australia, and the Hon. Samuel Samuels, the Postmaster-General of New South Wales, were in the city yesterday *en route* from Washington to their homes *via* San Francisco. These gentlemen are largely interested in the new steamship line between San Francisco and Australia, of which the first-named gentlemen is the Managing Director. They have been in this country to perfect ar-

rangements in regard to the transportation of goods from San Francisco to New York. The White Star Line of ocean steamers will run in connection with this line from New York to Liverpool. The entire trip will be made in forty-two days. A through express train, for the exclusive benefit of the passengers of the new steamship line, will run between New York and San Francisco, making the trip in five days. The new line will consist of five steamers. The first will arrive at San Francisco on the 25th inst., leaving for Sydney on the 31st. The line was started on the 23d of December. The company is building four new steamers, to be the fastest Clyde-built boats, capable of sailing at the rate of fourteen knots an hour. Twelve days' quicker time will be made by this line than by the present route *via* the Suez Canal and the Red Sea. The entire Australian mails will be

transported by this company. The contract has been let by the Australian Government for several years. The mails, express goods, and passengers will be in charge of Mr. A. W. Hall, who will run between San Francisco and New York. It is expected that all the bullion shipped to England will be sent *via* this route, and already English bankers are engaging transportation on the boats for their gold.

Postmaster-General Creswell granted permission to Mr. Samuels to ship all American mails *via* the new water route and the overland road. The postage has been fixed at 12 cents in American money. The railway route across the continent will be *via* the Pacific Railway to Omaha, the Chicago, Rock Island, and Pacific road to Chicago, the Lake Shore and Michigan Southern to Buffalo and either the New York Central or the Erie Railway to New York.

DUDLEY W. ADAMS,

MASTER OF THE NATIONAL GRANGE.

WHO is this Adams at the head of the Grangers? Where did he come from, and what are his claims to public confidence as a leader? Is there any thing in him or in his project to warrant us in trusting him? Is he a politician? Is he ambitious for office? What says Phrenology and Physiognomy? Can he be a great man? Judging by the numerous questions which are asked in regard to this person, we infer he must be something of a puzzle to many.

To us he seems to be a man of energy, with a purpose. He is bright, wide awake, quick, and clear. He has a snug and compact body and brain. He is full of work. There is no extra adipose tissue here; no mud in that mind. It is no compliment to him to state that his type of organization is something like that of General Grant. If it be not great, like that of Webster, or stately, like that of Clay, or grand, like that of Sumner, it is the embodiment of energy, mental activity, and of real working capacity.

There is Firmness, Self-Esteem, ambition, application, with any quantity of strong, practical common sense. He can talk, but prefers to work. He is ingenious, constructive, and far-seeing. He can read character and take the measure of men at a glance. He has integrity, and will hold to principles.

By bad habits and by bad associations the best of men may become perverted and go down; but one who is well grounded in moral principles and in true godliness will find His grace sufficient to fortify him in doing His will. The following sketch of his career is condensed from "The Groundswell," a new publication of Messrs. Hannaford & Company, of Cincinnati, which embraces the history of the farmers' movement, and a consideration of the political and social questions involved in it. Our portrait is also due to the courtesy of the same house.

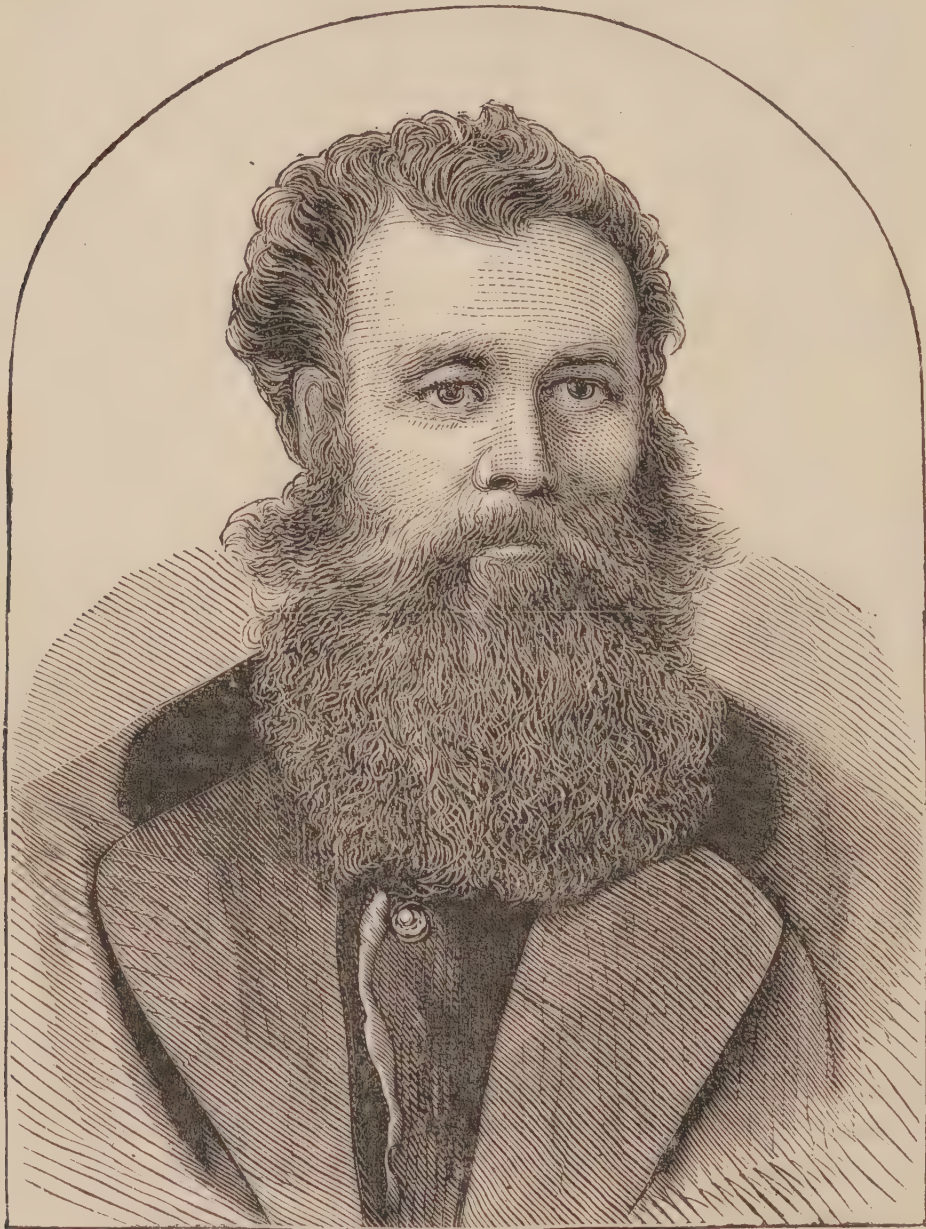
Dudley W. Adams was born at Winchester, Mass., on the 30th of November, 1831. Like many of the now prominent men of the nation, he passed his childhood and grew up to man's estate in a section where farming means the tillage of a soil never rich, and whose natural productions are rather rocks and stones than rank herbage and generous crops. But if the soil of the New England States is not celebrated for its agricultural wealth, the constant labor necessary to gain daily bread has taught her sons lessons of persistent industry and self-reliance that are simply invaluable.

When young Adams was four years of age his father died, and he was thus left to the care of one of the most self-sacrificing of

mothers, who spared no pains to lead the young mind in the paths of honor, probity, and religion. His time, until sixteen years of age, was spent as that of many New England boys is, in assisting in the work of a rocky farm, attending the district school and church, and engaging in the innocent frolics incident to such life. In time the district

His majority attained, Mr. Adams found that incessant labor and study had seriously affected his constitution; he was threatened, in fact, with that dire scourge of New England, consumption.

Carefully weighing the chances between an early death if he remained in his native hills, and the possibility of regaining his



DUDLEY W. ADAMS.

school was exchanged for the village academy, and to this early training is undoubtedly due the practical workings, later in life, of a mind always studious and eager for knowledge, and fostered and directed by the judicious care of a devoted mother. From the age of seventeen until his majority, he continued to work steadily on the farm during the summer months, teaching school in the winter and pursuing his studies in the spring and autumn.

health in some other locality, he quickly decided to emigrate to the West, and at once made his way into north-eastern Iowa. Here, in 1852, he located on a tract of wild land, which, under his skillful hand, was soon transformed into an excellent farm, and on which he has ever since resided, and where the flourishing village of Waukon has since grown up.

While working hard to improve his farm, Mr. Adams never lost sight of the necessity

of organization for the promotion of agriculture. At the age of twenty-two he was elected President of the Allamakee County Agricultural Society, and since that time he has been connected almost constantly with the Society in some capacity, either as secretary, member of the executive committee, or other responsible position.

Mr. Adams was never a believer in the dogma that fruit could not be successfully grown in the West. After the terrible winter of 1856 he still had faith in the ultimate success of fruit culture. In spite of the discouragements of climate, and the still more discouraging advice of friends, he gave much of his time and energies to this engaging pursuit.

At the age of thirty-six Mr. Adams was chosen Secretary of the Iowa Horticultural Society, in a manner highly complimentary to himself, although other business prevented his attendance at that session of the Society. This position he held until the winter of 1872-3, when his other official duties made it necessary that he should decline a re-election. That the office was worthily bestowed and honorably gained is evidenced by the fact that, in 1871, Mr. Adams exhibited at the Iowa State Fair one hundred varieties of apples of his own raising, of such beauty and excellence as to receive the highest award of the Society.

For about ten years he had served his neighbors in the several offices and public trusts of a local nature, and at the age of thirty-two he became the Republican candidate for the State Senate from his district, but was unsuccessful.

In the spring of 1873 the friends of Mr. Adams nominated him for governor of Iowa. This nomination was declined, not because the nominee was not as willing as heretofore to serve his fellow-citizens, but because he was at that time too deeply absorbed in the great work of his life—spreading the organization of the Order of Patrons of Husbandry, whose tenets proclaim it to be non-political.

Early in the year 1870 Mr. Adams and two of his neighbors, having heard of the Patrons of Husbandry, called together other neighbors, and organized Waukon Grange, No. 3, of the State. Seven months later they organized Frankville Grange, No. 4. Six

months subsequently, or June 12, 1871, the State Grange was organized temporarily, and Mr. Adams was chosen Master. In December of the same year a permanent organization was effected, and he was elected the Master for two years. This office he held until his election as Master of the National Grange early in 1873.

In 1871, when elected to the State Grange, there were less than a dozen granges in the State. He left it with over eight hundred working organizations. Since that time the State has fully kept pace with its previous record, its present membership showing over one hundred thousand tillers of the soil working together for their social, moral, and industrial elevation.

THE "GRANGERS" AND THEIR ORGANIZATION.

The word "grange" is French, and means a farm. Shakspeare uses the word as applying to a farm-house with its accompanying outer buildings. The designation as Grangers (French, *Grangiers*) of the agriculturists who are associated in the present great movement is thus entirely consonant with their vocation, although as members of the order they are "Patrons of Husbandry." During the civil wars which devastated England centuries ago the granges or manor houses were often the scenes of strife between contending factions, and were usually fortified by moat or ditch or high wall, so as to afford protection to the farmer and his family and dependents against attack. Thus the old grange was a sort of *stronghold*, and this is the sense in which the Patrons of Husbandry use it. The means of access may be aptly symbolized by the actual approaches of the grange as they existed in England, during times of trouble, viz., a drawbridge and a ladder. The degrees of the order symbolize the various departments of occupation in agricultural life, and have such appropriate names as the Laborer, the Maid, the Cultivator, the Shepherdess, the Harvester, the Gleaner, the Husbandman, and the Matron.

The order now so powerful in numbers and influence had its primary origin in 1866 through the efforts of Mr. O. H. Kelly, at that time employed in the Department of Agriculture at Washington. Later he found cordial co-operators in Mr. Wm. Saunders

and Mr. Wm. M. Ireland, also in government employ, and on the 4th December, 1867, the National Grange was organized, Mr. Saunders being elected Master. Up to 1873 the growth of the order was slow, the entire membership eighteen months ago being less than eighty thousand; but since that time the increase of granges has been very rapid, there being now upward of eleven thousand established in thirty-six States and Territories, and comprising a membership of nearly eight hundred thousand, nearly one-eighth of whom are women.

OBJECTS OF THE ORDER.

As set forth in the "Groundswell," the primary aims of the Patrons of Husbandry are not political, but social, intellectual, and co-operative. The order is no respecter of persons, color, sects, or sexes, but has reference most positively to character, declining to admit drunkards, gamblers, professional politicians, or those whose pursuits or associations place them antagonistic to farm interests.

The order means business, and will labor to bring the greatest good to the greatest number. Some of its general objects may be stated as follows, viz.:

1st. The ennoblement of labor, and the fraternity of the producing classes.

2d. Mutual instruction, and the lightening of labor by diffusing a better knowledge of its aims.

3d. Social culture, as also mental and moral development.

4th. Mutual relief in sickness and adversity.

5th. The prevention of litigation.

6th. Prevention of cruelty to animals.

7th. Bringing more nearly together the producer and consumer.

8th. The overthrow of the credit system.

9th. Building up and fostering our home industries.

10th. Mutual protection to husbandmen against sharpers and middle-men.

The past two years have been signalized by activity on the part of the Patrons of Husbandry, and farmers generally in the West, with regard to securing more and better facilities for the transportation of produce to Eastern markets. In some of the States, Illinois and Iowa particularly, the opposition

to railroad monopoly and extortion has become one of the great features of social and political thought. Many conventions have been held and strong expressions of opinion, in the form of resolutions with "platforms" of proposed action, have been set forth.

The farmers and Patrons of Husbandry are right enough in aiming to stem the current of corruption which runs strong in all departments of State and National Government by securing the nomination and election of honest and trustworthy persons to public office. The need of reform is general, and all good citizens should co-operate together for the common good; but the farmers may err by claiming too much in behalf of their special interests, and by overlooking the just rights of railroad corporations and the relations of trade. Mr. Periam, the author of the "Groundswell," admonishes them to be discreet in the exercise of their great strength as a political weapon, and to aim at the harmonious settlement of vexed questions and the normal development of all interests related to agriculture. Partial legislation and partial judicial leanings are not indicative of true improvement in a State, no matter what may be the favored class.

In February last the National Grange met in St. Louis. Among the measures set on foot were those designed to prevent the machinery of the order from being used by politicians. Some sentences from the resolutions unanimously adopted have an agreeable ring for the ears of all earnest Americans, viz.:

No grange, if true to its obligations, can discuss political or religious questions, nor call political conventions, nor nominate candidates, nor even discuss their merits in its meetings; yet the principles we teach underlie all true politics, all true statesmanship, and if properly carried out will tend to purify the whole political atmosphere of our country, for we seek the greatest good to the greatest number. But we must always bear it in mind that no one by becoming a grange member gives up that inalienable right and duty which belongs to every American citizen to take a proper interest in the politics of his country. It is his duty to do all he can in his own party to put down bribery, corruption, and trickery; to see that none

but competent, faithful, and honest men, who will unflinchingly stand by our industrial interests, are nominated for all positions of trust, and to have carried out the principles which should always characterize every grange member, that the office should seek the man, and not the man the office. We acknowledge the broad principle that difference of opinion is not crime, and hold that progress toward truth is made by differences of opinion, while the fault lies in the bitterness of controversy. We desire a proper equality, equity, and fairness; protection of the weak; restraint upon the strong—in short, justly distributed burdens and justly distributed power.

Other more prominent features in the broad programme for co-operative action, as announced by the order through the Central Grange, may be summarized thus:

We shall endeavor to advance our cause by laboring to accomplish the following objects: To develop a better and higher manhood and womanhood among ourselves; to enhance the comforts and attraction of our homes and strengthen our attachments to our pursuits; to foster mutual understanding and co-operation; to maintain inviolate our laws, and to emulate each other in laboring to hasten the good time coming; to reduce our expenses, both individual and corporate; to buy less and produce more, in order to make our farms self-supporting; to diversify our crops, and plant no more than we can cultivate; to condense the weight of our exports, selling less in the bushel and more on the hoof and in fleeces; to systematize our work, and calculate intelligently on the probabilities; to discountenance the credit system, the mortgage system, the fashion system, and every other system tending to prodigality and bankruptcy. We propose meeting together, talking together, working together, buying together, selling together, and generally acting together for our mutual protection and advancement, as occasion may require. We shall avoid litigation as much as possible, by arbitration in the Grange. We shall constantly strive to secure entire harmony, good-will, and vital brotherhood among ourselves, and to make order perpetual. We shall earnestly endeavor to suppress personal, local, sectional, and national preju-

dices, all unhealthy rivalry, and all selfish ambition.

But there are eminent men who look upon this agrarian movement with distrust, and caution us to be watchful lest it acquire too great an influence in matters political and social. The Rev. Dr. Curry, of the New York *Christian Advocate*, publishes a brief account of an interview he had with Parson Brownlow of Knoxville fame, not long since, at the latter's home; and in that account Mr. Brownlow is reported to have expressed sentiments rather adverse to the *animus*, as he understood it, of the great order. Perhaps many of our readers who are members of granges will be interested in knowing what the great preacher-editor thinks of them. Dr. Curry says:

"At Knoxville I called upon and had an hour's interview with the heroic ex-Methodist preacher, ex-Editor of the famous *Knoxville Whig*, ex-Governor of Tennessee, and now U. S. Senator, 'Parson Brownlow,' whose failing health has compelled him to come home for recuperation. His whole frame shakes with palsy like an aspen leaf. A lovely and dutiful daughter was attending him every moment with assiduous affection, but the aged veteran is apparently nearly gone. Yet his blue eye is as keen and his mind as clear as when he was launching from his press and tongue the lightnings of liberty in years gone by. He was originally a pro-slavery Unionist, but when he saw that slavery and the Union could not co-exist, his love for the Union bore down every rival, and he became the leading Southern advocate of emancipation and colored suffrage. No man living knows the temper of the South better than he. I asked him of the political feeling in East Tennessee. 'Some rebels left here, but they are down, never to rise,' was his answer. I then spoke of the indications of feeling I had noted farther South. 'Overpowered, but not subdued; rebels at heart now as much as ever,' was the reply. 'How about the Grange movement?' 'A political machine—Democracy in disguise—organizing powerfully for resuscitation and victory at every cost of principle.' 'How is the movement regarded at Washington?' 'Understood perfectly; watched closely, but quietly.' 'How is the Presidential outlook?'

'Not without apprehension of a Democratic triumph, and of another struggle to preserve the fruits of the war.' I have given Mr. Brownlow's words from memory of yesterday, but I am sure the quotations are substantially correct. We want no more blood; but there was a world of solemn meaning in what the aged hero of Knoxville said to me yesterday: '*This war closed two years too soon!*'"

We supposed the war was over, and had no idea that the Grange movement had any thing to do with politics. Indeed, we think that the "Patrons" of the North, East, and West are, as they profess to be, non-partisan and non-political, and we know some of the leaders are good American citizens whose patriotism is above question. We will not believe at present that the order is an invention designed to overthrow our Democratic Republican institutions.

Department of Physiology—Our Sanitarium.

Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

THE TEETOTAL MUDDLEMENT.

BY R. T. TRALL, M.D.

WAS there ever *such* a muddle? The women are praying the rum-sellers out of their business. Some persons are applauding and other persons are condemning their efforts. Some Christian ministers are quoting Scripture to show that Christ manufactured, and that the Book commends, an intoxicating beverage. Other Christian ministers are quoting Christ and the Bible to prove exactly the contrary. Medical men are writing *pro* and *con* concerning the uses and abuses of alcohol with renewed vigor. Professors of medical colleges are informing the people, through the media of the newspapers, that grog is good—good medicine, good drink, and good food—or, at least, a substitute for victuals. Other professors of other medical colleges are warning the people, through the columns of the same newspapers, that grog is neither medicine, drink, food, nor substitute for victuals. Family physicians of great learning and large experience assure their patrons that alcohol, employed in moderation, is useful. Other family physicians, of equal reputation and standing, declare that all use is abuse. Was there ever another muddle like unto the alcoholic?

Alcohol is the mystery of mysteries. Its place in nature seems to be past all finding out. The problems of pabulum, spontaneous generation, pre-historic man, or cremation *vs.* inhumation, are as nothing compared with it. Though its nature is simple enough—carbon, oxygen, and hydrogen—its properties puzzle doctors of divinity, doctors of medicine, and doctors of every other name and vocation.

Authors on toxicology declare alcohol to be a "caustic and irritant poison." Authors on materia medica affirm it to be a "supporter of vitality." Authors on pathology name a score of specific diseases which it produces, to say nothing of its general effect of *alcoholismus*. Authors on therapeutics tell us it is an indispensable medicament in cases of prostration and debility. Authors on physiology make it out to be everything or nothing, according to their stand-point of observation, as the rural schoolmaster was willing to teach that the earth was round or flat, just as the people pleased.

The people drink alcohol and become paupers, sots, vagabonds, maniacs, murderers. People drink it, and while they gibber and stagger declare they could not live without it. Temperance orators trace its history for four thousand years, and assert that vice, crime, and social desolation has ever blackened its pathway. Yet temperance orators get sick, and the temperance doctors prescribe alcohol to restore them to health. Statisticians tell us that alcohol is the chief agent in filling our prisons and penitentiaries, and the newspapers report murders every day in the year because of it; yet medical men administer a hundred thousand doses, and non-professional persons take a million of drinks daily. Arithmeticians calculate that money enough is expended for intoxicating drinks to pay our national debt in less than ten years; yet newspapers and politicians commend its manufacture and traffic as great and important industries.

Is there no way of getting at the truth of the uses and abuses of alcohol? Is this forever to remain the only problem that can not be handled logically nor scientifically? Can not our learned men find some reliable basis on which the subject can be rationally investigated, and its truthfulness demonstrated? Can not the principles of physiology, the laws of vitality, or the suggestions of common sense be applied to alcohol as to all other things under the sun?

There is a ray of hope for us. The *National Temperance Advocate* offers a premium of \$500 for the solution of this momentous problem. The sum is little enough, and so would \$5,000 be. Liquor drinking costs the good people of the United States \$2,000 an hour. \$500 pays the bill of intemperance for just fifteen minutes. If the alcoholic muddle could be un-muddled, and the truth placed on a scientific and univer-

sally-accepted basis by means of a \$5,000,000 essay, the premium would be cheaper than water at a dollar an oceanful. The liquor interest of the country would raise \$5,000,000 in a week if it were necessary to prevent their business from being prayed or legislated out of existence. Pity it is that only a paltry \$500 can be offered on the other side.

But we may hope that this sum will answer the purpose. Truth and victory are not always on the side of majorities and dollars. A higher motive power than any sum of money can represent may enlist the brains and pens that will exorcise the demon forever. There is truth somewhere. There is some way of finding it. May there be 500 competitors for the \$500 prize, and all of the best thoughts of the best writers treasured in a book that shall be a light to the world for all the ages to come.

TEMPERATE IN ALL THINGS.

IT is a beautiful thing to be consistent. We admire a bouquet of flowers if it is well arranged; if the different varieties are well distributed it adds a peculiar charm to the whole. But if simply the roses are arranged with great taste and the pinks and lilies huddled promiscuously together, the effect is spoiled. It is precisely the same with our characters. We may be very particular about certain matters and be exceedingly righteous in spots, but if we simply cultivate one or two virtues and neglect all the rest, the defect will be glaring and the results disparaging. A man may refrain from blackening his boots on Sabbath morning. He holds it a sin, and is very conscientious on this point; yet, as one has expressed it, he will proceed to blacken his neighbor's character every day the coming week. "Consistency, thou art a jewel!" As Good Templars, we put particular stress upon temperance. We insist upon it, and urge all to be temperate. But while we press this matter and make it so very prominent, let us see that our "moderation is known unto all men." Let us examine ourselves and see if we are temperate in all things.

We have met with many who were strictly temperate in drink but very intemperate in *speech*. They talked too much with their tongues. This "little member," like their

pulse, is kept throbbing incessantly, as though their lives depended upon its constant throb. The results, as with drinking, often prove disastrous. The majority of troubles arise from over-talking. Moses claimed to be "slow of speech." If so, he was on the safe side, and his position in many respects was an enviable one, as the danger lies in the opposite direction. To be no orator, as Brutus was, is often a blessing in disguise. Wise men tell us to "think twice before speaking;" but many speak twice and do not think at all. An old bachelor begs that we excuse the ladies in this matter, as their tongues are hung like a swivel—loose at both ends. We do not think much of the suggestion, and as he is a bachelor how should he know? We certainly admire a temperate talker. To know just when to speak and when to leave off is an accomplishment which belongs to the fine arts. Perhaps a pledge would remedy the matter. Napoleon, when angry, repeated the alphabet before speaking. By this time he had become temperate. We do not mean to plead for the reticence which characterized Poe's raven, but simply to avoid the other extreme, remembering that, under all ordinary circumstances, "speech is silver, but silence golden."

Many are very temperate in drinking, but

very intemperate in eating. This is a very delicate question, and we will "say grace" before we commence. It well becomes us to touch upon this point, though we speak from experience. This is a common weakness, and it has slain its thousands. It is the most common danger we know of from the fact that we are brought in contact with the danger so often. Intemperate eating breeds dyspepsia, which is known everywhere abroad as the "American disease." Its prevalence is apparent in that it "rides on every breeze, and lurks in every flower." Its results are sad to contemplate. Many good men need reforming in this particular. A man may get drunk upon victuals as well as upon rum. He hurriedly eats a big dinner, washing it down with hot coffee, and hastens back to his office. But he feels heavy; his mind does not work, his perceptive faculties are blunted; in fact, he is drunk, and perhaps goes to sleep. An eminent phrenologist and physician (one who ought to know) says, "We all eat twice as much as we need." How very intemperate we are at this rate! A very good man, suffering from dyspepsia, applied to his physician for relief. The prescription was, "to steal a horse." The patient opened his eyes in amazement. "Why, sir," said the doctor, "you would then be placed in jail, where you would get a spare diet served at regular intervals, which would effect a perfect cure." We once heard a distinguished person remark that he had "often felt mean as a dog in yielding to the earnest solicitations of his host to partake of the tempting dessert." Dean Swift, in his old age, used to imagine that he could see the sheep and oxen galloping around him which he had during his lifetime unnecessarily eaten. One of Franklin's "Ten Rules" was, "Never repent of having eaten too little." This view of the matter may appear more conclusive to boarding-house proprietors than to the boarders, but the philosophy is patent to all who have inquired into the laws of hygiene.

Then there are others who are intemperate workers. Their number, however, is limited. We heard an eminent physician remark, not long since, that "there was a great deal of philosophy in loafing." It occurred to us that the "philosophy" depended on how

long the loafing was continued. To loaf at intervals may be healthful, but to make it our profession is in bad taste, and not in accordance with the views of Poor Richard, or Benjamin Franklin. The doctor's "philosophy," however, is accepted by our later Franklins, and the amount of "philosophy" now extant would fill so many volumes that the world could not contain them. Yet there are some who look upon resting as rusting, who are not happy unless "hard at it," such as Barnes, McClintock, and Greeley were. Had these stopped to inquire into the doctor's philosophy they would probably have been living to-day. The doctor's idea, if we understand him, is to avoid intemperance in work—take it easy—do what you can. But let us be careful lest any should unconsciously adopt the Indian theory: It is better to walk than run; it is better to stand than walk; it is better to sit than stand, and still better to lie down than sit.

It is now time to retire, and we are reminded that there is also danger in being intemperate in sleep. We turned over a new leaf on New Year, and now arise when we are called. Of course we can consistently speak on this point. It would not do to "preach cream and practice skim-milk." Eight hours, it is said, is all that is necessary for ordinary mortals to sleep; yet we think the majority indulge beyond this time. There is considerable intemperance in this direction. But we fear that arguments would fail to convince and arouse many long sleepers on frosty mornings, especially Sabbath mornings. A little boy, on being informed by his father from the bottom of the stairs that "the early birds got the worms," replied, "Just served them right; they had no business to get up so early." The old couplet which we used to hear so often, "Early to bed and early to rise," seems to have lost its force with the young people of the period. A nap in the morning is considered preferable to all such poetical nonsense. The motto now is, Late to bed and late to rise. Many find that the two hardest things they are called upon to perform is to get down when they are up, and to get up when they are down. A recent writer contends that to turn out before daylight and come down to a poorly-warmed, cheerless dining-room, and

eat breakfast by candle-light, is unhealthful, unchristian, and almost barbarous. Yet this is better than so much intemperance in sleep. Mr. Wesley called this over-indulgence "soaking in bed." We all feel sad when we see an "old soaker," as we sometimes term hard drinkers, but how much "soaking" is going on in this direction! How many "old soakers" we meet everywhere! In conclusion, let no one suppose that we are not a *Good Templar*. Our order only claims to be "good," while the above refers to the comparative and the superlative.

REV. J. A. TRIMMER.

ELECTRO-BIOLOGY.

THE New York *Baptist Weekly* publishes the following: It is well known that in the year 1851, Mr. Braid, a Scotch surgeon, established in Manchester, who was present at the mesmeric exhibitions of Lafontaine, was first struck with the idea that these phenomena, proclaimed as the effect of a magnetic fluid, were only a natural consequence of the fixed look and entire abstraction of the attention, which present themselves under the monotonous manipulation of the magnetizer. Mr. Braid proved in his experience the entire dispensableness of a so-called magnetizer, and his supposed secret agents, or fluids, produced through certain manipulations; he taught the subjects of the experiments to place themselves in this sleeping condition, by simply making them gaze fixedly at some object for a long time with a strict attention and unmoved gaze. It is therefore clear that this condition of the nerves, caused by the steady look and attraction of attention, in one part of the brain, brings the other parts into action with it and changes the functions, to whose normal activity the phenomena of the will are united. This is the actual, natural, physiological connection of this mysterious appearance. It only remains to us now to ascertain which portions of the brain first and secondly become altered, and in what these changes consist.

According to Braid, for example, on one occasion, in the presence of 800 persons, ten out of fourteen full-grown men were placed in a sleeping condition in this way. All began the experiment at the same time; the former with their eyes fixed upon a projecting cork, placed securely on their foreheads; the others, at their own will, gazed steadily at certain

points in the direction of the audience. In the course of ten minutes the eyelids of these ten persons had voluntarily closed. With some, consciousness remained; others were in catalepsy, and entirely insensible to being stuck with needles, and others, on awakening, knew absolutely nothing of what had taken place during their sleep. Even more; three persons of the audience fell asleep without Braid's knowledge, after following the given direction of fixing their eyes steadily on some point.

Braid's experiments, which are designated as the beginning of a scientific investigation of extremely complicated nervous phenomena, did not find at first the esteem and homage due to them, and gradually sank into oblivion. This is explained by the fact that they were associated with mesmerism; and Lafontaine, whose "magnetic" exhibitions were the first cause of Braid's investigations, protested, not without animosity, that "hypnotism," or "Braidism" was identical with his "mesmerism." Braid himself, in the course of his experiments, seems to have lost his former scientific force as an investigator. Then, in 1848, Mr. G., the American, with his "Electro-Biology," appeared, and took up the intellectual epidemic of medium and spiritual apparitions, which we witnessed in astonishment, and saw the whole world more or less impressed by it. It was, naturally, then, not at all surprising that hypnotism, or Braidism remained almost unknown to science. Only once it attracted scientific attention and interest, and then only for a short time. This was in 1859, in December, after Velpeau and Broca, two well-known French surgeons of *La Societe de Chirurgie*, in Paris, caused the most intense sensation by placing twenty-four women in a sleeping condition by Braid's method, and then performing surgical operations without causing the slightest pain.

[For want of proper definitions, there is much confusion in regard to the proper classification of this hitherto mysterious subject. The following is, in brief, submitted as the best yet offered :

DEFINITIONS.—Mesmerism is the art of communicating a species of sleep, which is supposed to affect the body while the mind or intellectual power is active and intelligent. Physiology, in its relation to the laws of life, is the science of the functions of the entire Natural Man. Phrenology is that part of Physiology which embraces the brain and nervous system, through which the mind is manifested. Physiognomy is the art of discerning the character from the external signs of the countenance. Psychology relates to man's spiritual nature, or to the science of the soul. Biology is the science of life, and is synonymous with Physiology.*

* THE LIBRARY OF MESMERISM AND PSYCHOLOGY, published at this office, price \$4 [see Catalogue] contains all that is known on the subject.



NEW YORK,

JUNE, 1874.

A STOP AND A START.

HERE we are, dear reader, at our first stopping-place on our journey through the year. It is "the half-way house." With this JUNE number closes the half year's volume—the fifty-eighth—and this must be a brief halting-place, where editors and readers may "breathe a moment" before taking a new start. Some, no doubt, will drop off at this point, others will promptly "call at the captain's office and settle" for the balance of the year's trip. Still others will join the party and "have a good time" all the way from the coming July to January. Volume FIFTY-NINE begins with the next number. Renewals are now in order, and we beg present subscribers to bring their friends and neighbors with them, though it be for only a six months' trip. Where there is a club formed of ten or more, the price is only \$1 each for the half year; full price, for single subscribers, for a half year is \$1.50, or \$3 for a year. A little personal effort on the part of each present subscriber ought to give us a club of ten or more in every neighborhood. Shall we have them?

A SHORT STOP.—At this—June—station we stop only long enough for passengers to procure tickets for the balance of the year's journey. The train will start promptly on time—with July number, Vol. LIX.—and all are desired to be on board when the clock strikes. It is unfortunate to be left behind.

A PLEASANT TRIP.—So far as we have heard, those who have journeyed with us thus far the present year have expressed satisfaction with both the fare and the treatment which they have received, while many are regretting they did not join us sooner. Reader, what say you?

OUR OPPORTUNITIES.

THEY come to us on every hand, and how few, if any, of them do we heed! We drearily sigh and complain that we have not such opportunities as we would at once seize. Opportunities for what? Most of us make answer, "To rise on the golden wave of fortune—to 'make money.'" Some answer, "To live in accordance with my desires for leisure, ease, and comfort." Few answer, "To improve my mind, so that I may be more intelligent and influential." Here and there a

lone one answers, "To live a higher, better life, and be able to illustrate a true morality."

All mistake. There may be

"A tide in the affairs of men

Which, taken at the flood, leads on to fortune,"

but such is not the true opportunity which conduces to real wealth. That opportunity comes to every one born under normal conditions amid the light of Christian civilization. That opportunity is not related to the gold or silver spoon which administers the infant's porridge. That opportunity scarcely depends upon external facilities or associations. It consists in the spirit, the will, the determination to live a good life, to be an honest, honorable man or woman.

"Man's necessity is God's opportunity," the old proverb declares, and how true it is that the man who is earnestly and faithfully striving to love the good and pursue the right, be he a poor laborer in the quarry or in the deep and gloomy mines of Lancashire, year after year following his treadmill round, will be rewarded by an inward illumination, by an expansion of soul that will lift him above his painful life, and make him cheerful amid its very distress.

"What right have you to complain of a hard lot?" said the legless man to the armless. "If I had your ability to get about I'd think myself lucky enough." Poor fellows! each regarded his own maimed state as debarring him from opportunities enjoyed by the other, while John Carter, of England, with his entire body below the neck paralyzed and helpless, and Laura Bridgman, deaf, dumb, and blind, could find many ways in which to please and even instruct others, and to render themselves of use and value to the community.

Wherever is found a suggestion that may be utilized in one way or another, for one's own behalf or to the advantage of a brother or sister, there is found an opportunity. A good word kindly spoken to one distressed, despairing, has often been the harbinger of peace, safety, and new effort—a precious opportunity scarcely considered by the giver, but most grateful to the receiver.

Educational opportunities, especially in this country, are so abundant that it would seem impossible to find the man or woman so conditioned as to be unable to pluck some

benefit from them. The newspapers, the magazines, especially the latter with their wealth of thought, contain materials for self-instruction. Many a man has risen above the crowd who found his education and his early incitements to effort in their careful study. A good magazine coming to the family table month after month, furnishing its supplies of pleasant reading, blended with seasonable advice for father, mother, son, and daughter, is a powerful agent of instruction; and it seems to us that no parent who has the welfare of his children at heart; no husband who has the pleasure and improvement of his wife in serious consideration; no friend who can spare the means to please and benefit another, can so thoroughly accomplish his purpose, and at so little pecuniary cost, as by securing for them, her, or him the regular visits of such a periodical.

Every human being is mainly the architect of his own destiny, and in this age of printed sheets and readers the quality of their reading has far more to do than most of us think in molding the character and shaping the course of the young. The publisher of a paper or magazine which disseminates true science in a form intelligible to ordinary minds; which indicates the means for preserving the health of the body and supplies material for the development of the mind, and gives sound counsel for the improvement of the moral and religious character, is one of the noblest of missionaries. And where such a publisher and such a publication exist society has at command one of the grandest of opportunities for its intellectual and moral elevation. Laws and ordinances, jails and asylums, with their complicated and costly machinery, can not compare with a healthful, high-toned daily, weekly, or monthly journal for good effects and continued influence.

It seems to us that he who has been the recipient of benefits conferred by such a journal commits not only an indiscretion but even a sin by unnecessarily suspending his relations with it, not that he may be ungrateful for its instruction, but that he shuts off the flow of mental food he has found useful and *convenient*, and avoids the recurrence of opportunities for acquiring more of that wealth which can not be taken from him.

Besides, he that does not advance in mental and moral growth falls back. He that has been persuaded to relinquish any bad habits through the importunity of a friend, finds that friend's association most influential in fortifying himself against the old temptations. That friend absent, he feels less confidence in his own strength to meet the old enemies should they come insidiously upon him. But a friend can not always remain at hand; he, too, may have opportunities too good to be disregarded, which call him to another sphere of action, while a well-sustained periodical of the kind described is most likely to endure and to offer generous aid and sympathy whenever its leaves are turned.

Reader, neglect not your good opportunities.

——— "Seize, then, the hour

When fortune smiles, and duty points the way;
Nor shrink aside to 'scape the specter Fear,
Nor pause though pleasure beckon from her bower,
But bravely bear thee onward to the goal."

SACRAMENTAL WINES.

THERE is confusion among commentators, theologians, rabbis, and priests as to the sort of wine Christ made for the marriage feast. One maintains that it was "fermented," and therefore intoxicating; another, that it was simply expressed grape-juice, called the "fruit of the vine;" another, that it was magnetized water; and another, that it was a miracle, therefore impossible of explanation.

Now what is wanted to settle the question is a *right interpretation* of the Scripture. If it can be made to appear that Christ made an intoxicating drink, or that He commended its use, or that He was, indeed, what His enemies represented Him to be, a "glutton and a wine-bibber," then many of the so-called Christians of to-day will justify themselves in "following His example," even in this respect. There are others, however, who will *not* believe that Christ was a glutton or a drunkard. They will accept any theory as to the fact about His making "wine out of water," rather than that he encouraged habits which lead directly to drunkenness, death, and hell. And, since *each* individual human being is personally responsible for the safety

of his own soul as well as for the health of his own body, it is right and proper that *each* should interpret the meaning of the Scriptures in this and other matters for himself. In other words, each of us may do our own thinking, and not "pin our faith on any man's sleeve."

What were the wines of Scripture? Were the wines of the Jewish passover fermented wines? Would such wine as was used at the marriage feast intoxicate? Was the wine used at the Lord's Supper a distilled or fermented intoxicating drink? No man's *ipse dixit* can settle the question. We may, by going back and learning what were the customs of the people among whom Christ lived, labored, and taught, *infer* what sorts of food they eat, and what were their drinks. There is no account of distilleries among the Jews in Christ's time, as we have among bad Christians to-day. There was no Bourbon, Irish, Scotch, or other whiskies. There was no British beer or Scotch ale. There was no champagne to give unnatural vivacity, to be followed by headache. Christ asked a blessing on none of these. But what *did* he approve or use? Let us see. Here is the testimony of a learned Hebrew rabbi, Dr. S. M. Isaacs, editor of an influential religious newspaper, *The Jewish Messenger*, who says:

"In the Holy Land they do not commonly use fermented wines. The best wines are preserved sweet and unfermented. In reference to their customs at their religious festivals he said, 'The Jews do not, in their feasts for sacred purposes, *including the marriage feast*, ever use any kind of fermented drinks.' In their oblations and libations, both private and public, they employ the fruit of the vine—that is, the juice of fresh grapes and of raisins—as the symbol of benediction. Fermentation is to them always a symbol of corruption, as in nature and science it is itself decay, rottenness."

From this the inference is clear that the custom of the people of that country was to use the *unfermented juice of the fruit*, and *this* can not intoxicate. We are disposed to believe, with the rabbi, that Christ had no reference to intoxicating drink when He made wine of water, and that it is a *perversion* of Scripture to claim that He did.

"The testimony of Rabbi Isaacs as to the practices of the Jewish people is conclusive. It settles the question so often mooted, 'What was the "best wine" made by Jesus Christ for the marriage feast of Cana?' And not less decisively does it show what was that 'fruit of the vine' used by Him at the institution of the Lord's Supper. This sacred Christian feast was confessedly a substitute for (and immediately followed) the Jewish feast of the Passover, from which all fermented things—bread as well as wine—are carefully excluded. The pretence that the drunkard's drink was in any form provided or encouraged by Him who 'came to save that which was lost' must be utterly abandoned before one can hope to banish drunkenness entirely, even from the pulpit, the pew, or the communion-table. Let 'judgment begin first at the house of God.'"

In his conversation with the gentleman who reported him the learned rabbi made one assertion which will surprise the general reader. He said that, of the seventy thousand descendants of Abraham in this city—New York—he does not know one confirmed drunkard, and that they seldom, any of them, drink to intoxication. [And are the Jews, indeed, a more sober and temperate people than professed Christians?]

And now the question is, How may we celebrate the Lord's Supper without using fermented wine? In some of the Roman Catholic churches priests bless or consecrate water for this purpose, so do the Mormons in the Great Tabernacle at Salt Lake City. Others, Catholic and Protestant, procure raisins, put them in water, and, after standing awhile, express the juice therefrom, and thus secure the "best wine," which will make no man drunk, nor tempt him to drink alcoholic liquors of any sort. Thus we may fulfill all the requirements of the Scriptures, partake of the Sacrament in pure water or in the "fruit of the vine," and not commit sin by putting "the intoxicating cup to our brother's lips, which would cause him to stumble or to fall." If there still be a doubt on the question, why not lean to the side where no harm can come rather than venture where harm most certainly will come? No one becomes a drunkard all at once. He first sips a little, then he drinks "moder-

ately," then immoderately, then you hear of him in the bar-room, the saloon, on the race-course, in the play-house, gambling-hell, almshouse, asylum, prison, on the gallows, in the potter's field. And all through indulgence in that which is not, in its proper sense, either food or drink. Let us not use poison even for medicine or for sacramental purposes.

THE BIBLE AND PHRENOLOGY.

THE following is one of the many forms in which the subject is brought to our notice:

"Have you a book that will thoroughly prove that Phrenology agrees with the Bible? If so, I will send for it immediately. I mean a book in which Phrenology and the Bible are compared. G. M."

ANSWER.—It might be disputed by some that man's Veneration is among the strongest of his faculties, but as long as history records opinion and action, there is evident proof that men cling tenaciously to that which they think sacred; and sometimes hold on to the old after the new has been proved to be the better.

When the spinning-jenny was introduced into England, it caused riots; when the power-loom was introduced, the same thing happened. The inventor of the sewing-machine strove for years to convince people that sewing seven stitches by machine where one stitch could be taken by hand, was an improvement. They nearly let him starve before they would use his machine. The subject has since been discussed, and we all know the result. The old wooden plough was adhered to by some farmers twenty years after the iron plough had been shown to be altogether preferable.

When Galileo said he thought the world was not flat like a table, and that the sun did not rise and set by going around the world as it appeared to do daily, the moral and religious world regarded it as false in philosophy and heretical in religion, and he was obliged, publicly, to kneel, burn his books, and recant the heresy, though in rising he grumbled out the statement to some friend of his, "But it does move," showing that though compelled to recant, he was not convinced. On the same spot where the philoso-

pher was thus humiliated, it is not to-day considered heretical to teach his doctrines, and the successors of the priesthood that compelled him to do it, to-day recognize that their predecessors were in a grave mistake.

Forty years ago he who dared to say that there must have been some mistake in the interpretation of Biblical chronology as to the time when the earth was created, and that the doctrines of geology were true, showing that the earth itself was perhaps 50,000 years old before it was sufficiently prepared for man to dwell upon it, was looked upon very much as Galileo was by the honest, religious men of his time, all tending to show that the letter of the Scriptures is reverently adhered to, though science may demonstrate that the language can not in all cases be accepted literally. We remember to have heard a great geologist, and also a divine, deliver a lecture on geology, and in examining the first chapter of Genesis, he said, "In the beginning, when? no matter when, but, 'In the beginning God created the heaven and the earth, and the earth was without form and void, and darkness was upon the face of the deep.'" He said: "This is a simple statement that at the beginning God created the heaven and the earth," and added, "when in process of time it was so changed as to be fit for the abode of breathing animals, animals and men were created." Geology was looked upon with doubt and fear, but to-day these first simple teachings of geology are accepted by the religious world without question, so far as we know.

Phrenology has been treated with no more hospitality than geology and astronomy were. As the Scripture says, "From the heart proceedeth evil thoughts," etc., that passage of Scripture was used to break the nose and put out of countenance the phrenological student. In the language of the time when the Bible was written the heart was by many supposed to be the seat of thought and affection. It should not be forgotten that we also read in the Scripture that "God searcheth the hearts and trieth the reins of the children of men." We also read of the bowels of mercy, as if that region was the seat of pity and mercy. Many people accept the heart as the seat of thought

and affection, who would laugh at the idea that the bowels or the reins had anything to do with character. It may be safe and proper to say that the wonderful mechanism of the universe, now revealed by the telescope, the microscope, and solar chemistry, constitute a basis of fear and devotion toward the great Creator unsurpassed in any literature; that the wonderful structure of the earth, as taught now by geology, and the beautiful machinery of mental life, as organized in the brain, evidence a wisdom and power in the Divine Original which awaken wonder as well as devotion, while they satisfy the intellect and the imagination in their widest and sublimest reaches.

It is well to ascertain whether the Bible teaches the principles involved in Phrenology. We may state that every passion and emotion, every talent and imagination, every ambition and affection which Phrenology teaches, is recognized by the direct language of Holy Writ. We published some years ago a little pamphlet entitled, "Harmony of Phrenology and the Bible," quoting texts of Scripture in recognition of every faculty. A man may be a thorough phrenologist, and accept every doctrine or moral precept contained in the Bible. Some people claim that Phrenology is at war with free will; but not a bit more than facts are. Man is free and he is not free. Within a certain sphere he is free, and there he is responsible; outside of that sphere he is not free, and, therefore, not responsible. Common men are not free to reason like Bacon or Webster, but each man who is required to reason at all can reason according to his talents, and is required to do so. The doctrine of the talents, as set forth in the 25th chapter of Matthew, explains that one has five, another two, and another one, and that each person is responsible according to what he has, and what he can do, and not otherwise; and there is no philosophy of mind at all comparable to Phrenology in setting forth this common sense truth so finely brought out in the chapter referred to. Much of the phraseology of the Old Testament had doubtless reference to the people to whom it was addressed, and the times and conditions in which they lived; and the whole Christian world recognizes that the law and its ritual were fulfilled.

If your Jewish friends wish to discuss the question, we shall have to adopt a line of argument suited to the reverence they bear to their time-honored ceremonials. Those who wish the pamphlet "Harmony of Phrenology and the Bible," can obtain it, postage free, by sending ten cents, which explains the nature, the proper use and perversion of each faculty, and passages of Scripture recognizing these uses and abuses.

PHRENOLOGICAL INSTRUCTION.

IT gives us pleasure to notice the increasing inquiry among people of intelligence and respectability in regard to obtaining instruction in theoretical and practical Phrenology and Physiognomy. As man is the great factor in the world's affairs, those who are to teach and govern the young; those who are to make and administer the laws for persons of full age, and manage the vicious or the insane; those who are called to the fields of trade, commerce, or manufactures, to heal the sick or to cultivate the moral nature and lead bad men to virtue and to God, are finding out that man is a being of wonderful faculties, varied passions, and high susceptibilities. They are also beginning to learn that those who have to do with men, good and bad, need more knowledge of men in their interior conditions; that a method of reading strangers correctly at a glance is needed, in order to enable those who must deal with strangers in the great whirl of active life, to avoid mistakes at every turn. The old philosophy of the mind does not supply this power. It never professed or tried to do it.

Those who feel the need of such knowledge are turning to Phrenology and Physiognomy for the help they can obtain nowhere else; and in our annual classes, commencing about the first of November, ministers, physicians, lawyers, teachers, merchants, manufacturers, and men and women who desire to make Phrenology a profession, are found earnestly intent on acquiring all that can be taught in the realm of character-reading. It is well to listen to all who can teach us of astronomy, geology, and of geography. We honor Kane and Hayes and Hall and Liv-

ingstone, who fight with the ice or swelter under a torrid sun, but we regard that knowledge which opens out the hidden resources of mind and imparts light respecting the noblest part of God's creation—MAN and MIND—as ranking in importance far above any results which may be hoped for from exploring Africa, the Arctic regions, or the realms of space with its distant worlds and suns. Man stands at the head of all subjects of human inquiry, and he who can read the laws of his body and his mind is doing the best work with a promise of the best and most durable results.

SUGGESTIVE FACTS.

THE New York *Evening Mail* says: "We reproduce a part of the remarkable statistics published by the *Times* in regard to the relative proportion of crimes perpetrated in this city by citizens of American and foreign origin. The facts collected by the *Times* are too valuable not to receive due notice."

We copy the gist of the statistics referred to:

Commitments to the penitentiary for the last twelve years (no mention being made of the swarms of commitments to station-houses and the Tombs for brawls, fights, etc., which were let off with fines and short terms of imprisonment): Total committed, 18,762; American born, 6,984. To be proportionately equal to the American born population there should have been 10,413. Those who were of American born *parentage*, numbered 1,183, or $6\frac{1}{2}$ per cent. of the whole; while of foreign born *parentage* there were 5,801, or 31 per cent. of all. Of the foreign born the commitments were 11,778, or 3,433 more than their fair proportion; of those born in Ireland, there were 7,190, or 3,146 more than their proportion of the foreign nationalities. German born, 2,157, or 891 less than their proportion among foreign born citizens. Other foreign born, 2,431, or 1,103 more than their proper portion.

These figures show conclusively that the amount of crime committed by foreign born persons, and those whose parents were foreign born, is much greater than that committed by persons who are of American *parentage*. These foreign elements probably do not properly represent the average of the nations from which they come. We get a larger portion of the poor, ignorant, restless, discontented, warped, wayward and wicked than the average where they come from. When our country friends

are amazed at the enormous wickedness of New York, and are inclined to censure us for our laxity of administration, "we trust they will not forget the enormous foreign element which we are obliged to educate, provide for, and regulate." True, we have our Tweeds, Sweeneys, Garveys, Ingersolls, Genets, and Connolly's, some fortunately in, and some out of the reach of our penitentiary; it should not be forgotten that these great frauds were made possible by the peculiar constituency which stood behind the robbers, and by electing them to offices of trust, made their gigantic swindles easy, and hard to be detected. In the various countries of Europe there is left behind a wealthy and refined class, a great respectable middle class, and a mendicant class, too poor to emigrate except by the aid of their friends in America, who have come here and earned the money to bring them over; or they are sent to our shores from their prisons and poor-houses, or from a class who are next door to it. Some ten years ago a ship landed at New York from Liverpool which brought perhaps six hundred emigrants, over three hundred of whom had neither money nor friends here, and it being December they were marched in a body to the alms-house, and lived on our tax-burdened city till the next April.

Of course it was cheaper for the authorities to send over paupers and criminals in the fall than it was to feed and clothe them till spring. When, by such means, our population is cursed with ignorance, poverty and crime, we can not easily make it assimilate to the rules of virtue, intelligence, and order. Yet our English brethren charge the American people with being tricky and dishonest. We have too much of the dirty clothing to wash for our brethren abroad to have our stream entirely clear, but free schools, popular liberty, and an abundance of land, enable us to absorb and improve vast hordes of the ignorant and *vicious*, because poor and oppressed, of the unfortunate surplus populations of the old world. Some of these accessions to our population have native talent and become political demagogues, who make voters and followers of their newly-arrived brethren by means of perjury and in violation of law, and it is not surprising that we are *sometimes* badly governed. Brethren of the old world, please send to us a larger number of the better sort of your citizens, for they are always welcomed, respected, and loved; but spare us from so many of the ignorant and vicious, or spare the

severity of your criticism in regard to our public morals. If you were to hear read the list of the names of our criminals, on account of whose vices you blame us, you would think you were listening to the pages of your own city directories. God save the Republic!

IRISH SAINTS.

A NEW work has been published lately, in Dublin, on "The Irish Saints," in which great Saint Patrick, no doubt, heads the list. Whether the good father Mathew, the temperance apostle, finds a place in the new book, we do not know; nor do we know of any Irishman more worthy of a memorial than he. This book has suggested to us the idea that there should be other works on other saints. Why not now publish a book of English saints, and another of Scottish saints? Then, as a matter of course, we should have others of Dutch, French, Italian, and of Spanish saints. And, while about it, not to be partial, we should like to see a book of American saints! There was "The Father of his Country," you know, and B. Franklin and H. G. and—well, we can not enumerate all *our* saints in a paragraph. That must be a work of study and of time. We may mention one or two more who will one day take their places among American saints. The Quakers have their William Penn; the Shakers their Ann Lee; the Mormons their Joseph Smith and Brother Brigham. But enough. Should we go on we might put the editor of the PHRENOLOGICAL JOURNAL among the prospective American saints, and *that* might seem profane to our elders. We therefore leave the completion of the list to a wiser and more appreciative pen. But let the Old Country saints, with portraits, be embalmed in modern books as soon as possible. They will sell.

NAMES OF PLACES.

IN naming villages, post-offices, railway stations, etc., why not have reference to appropriateness, to euphony of sound, and to the beauty or sublimity of the place? In the hands of a Longfellow, even Indian names have a grace and beauty quite worthy of preservation. Read his *Hiawatha*, and note such names as *Minnehaha*, *Nokomis*, and many others at once beautiful and expressive. Then we have those grander names, such as *Niagara*, *Toronto*, *Oswego*, *Cayuga*, *Owasco*, *Ontario*, etc., all of Indian derivation.

An exchange gives the following as the Western nomenclature: "When, at Kalama, you enter Washington Territory, your ears begin to be assailed by the most barbarous names imaginable. On your way to Olympia—that is a pretty name—by rail you cross a river called the Skookum Chuck; your train stops at places named Newaukum, Tumwater, and Toutle; and if you seek farther, you will hear of whole counties labeled Wahkiakum, or Snohomish, or Kitsar, or Klikatat; and Cowlitz, Hookium, and Nenolelops greet and offend you. They complain in Olympia that Washington Territory gets but little immigration; but what wonder? What man, having the whole American continent to choose from, would willingly date his letters from the county of Snohomish, or bring up his children in the city of Nenolelops? The village of Tumwater is, I am ready to bear witness, very pretty indeed; but surely an emigrant would think twice before he established himself either there or at Toutle. Seattle is sufficiently barbarous; Steilacoom is no better; and I suspect that the Northern Pacific Railroad terminus has been fixed at Tacoma because it is one of the few places on Puget Sound whose name does not inspire horror and disgust."

Now, there is no necessity for such "barbarisms" in naming new places. Intelligence, refinement, and good taste will suggest for each something inviting or attractive, instead of something vulgar or repulsive.

WILHELM VON KAULBACH.

THE death of this eminent painter, of cholera, on the 7th of April, has awakened deep regret in the world of art. He was the son of a goldsmith, and born at Arolsen, in October, 1805. His pictures are well known in America, so many of them having been subjects for the engraver, especially his "Battle of the Huns," "Destruction of Jerusalem," "The Confusion of Tongues at Babel," "The Era of the Reformation," "The Blooming Time of Greece," the "Nero," the famous "Madhouse" of Narunhaus, "Era of Reformation" (which was purchased by an American), and his most charming work is the illustrations to "Reynard the Fox."

He was a man of medium stature, rather spare, with keen gray eyes, a nervous temperament, easy and genial manners, and disposed to pleasantry and humor.

Department of Literature, Science, Education.

LANGUAGE AS RELATED TO MAN.

IT has been said that "God gave to man reason and religion by giving him speech." By making him capable of using the one, He put it in his power to enjoy the other. If this be true, then we justly give the best part of our early life to the acquisition of the wonderful faculty of speech—to the cultivation of that divine art of receiving and communicating knowledge, and of enjoying sentiment, religion, society, and truth. Then, let its inestimable value be the excuse for calling attention to it now.

Language is not simply a combination of empty sounds. Nor is it merely the giving of a name to an idea. Nor yet is it confined to oral and written expressions of thought, but extended beyond that to include thought itself, when it is reduced in the mind to a tangible form. It is the sensible impersonation of human spirits in communion with one another. It is the ethereal symbol of the soul by which it knows and is known.

Its character and effects depend a great deal on whence it comes and how; though it will hardly be necessary to ask if its origin is divine, much less to inquire at what period in the development process it appeared, or by what fortuitous collocation of organs it was rendered possible. We will let it tell its own story, and believe what it proclaims its heavenly birth. We want to inquire no further into its genealogy than that Jehovah spoke to man, and language is the result. As the ear could never know harmony in a soundless voice, so the tongue had never known speech in a voiceless world. Thus testifies all human experience. So, choosing the less wonderful as the more reasonable, we conclude that language came with the breath of God. It is only the less wonderful, however, because the more natural. Indeed, could we but step out of our own experience, we would behold in nature the grandest and most stupendous miracle of all the works of God. That the ponderous machinery of the universe should be so constructed that it

moves with unerring precision is far more wonderful than calling the dead to life. We can only see nature in her grandeur when she is stripped of her commonness; so we can never estimate the true character and value of language until we shall have advanced beyond that point where our sense of appreciation is blunted by familiarity.

Its connection with thought is so intimate, and its use in reasoning so important, that to separate it from the one and to dispense with it in the other would be to destroy both. Men say they can think without it, but no man yet ever had a real and substantial idea that was not in words. He knows nothing that he can not tell. He may have a ghostly idea flitting through his mind like a fugitive dream, but language is the Daniel that must call it up and give the interpretation. Without this, "charm he never so wisely," it resists all his wooing, and though its shadow may haunt him, its substance escapes. It is only when it is caught and imprisoned by that divine detective that it becomes an available power. Ideas are the soul of language, as language is the soul of humanity, but they can only be apprehended when they take a sensible form, just as we know nothing of our own spirits but by their manifestations through the body. In the ratio that we understand the use, power, and relations of language can we comprehend that mysterious thing we call self. Language is the essence of a man. It comes to us tintured with and shaped by the very soul itself. It is the key to the labyrinth of the spirit. Take, open, and know thyself.

Its power and importance may be studied in its daily effects upon our lives. Every permanent and radical change in a man's life owes its beginning and growth to speech. We might even go farther and say that every individual act may be traced to the same source. For be it remembered that those spontaneous actions called instinctive are both prior to thought and independent of it,

and can be said in no sense to be induced by an exercise of volition. It would seem, then, that there is no exception to the rule that all the conscious workings of life, whether good or bad, are the outgrowths of language.

Suppose we grant that there can be thought without speech, what is its practical value? No more than that of the gold hidden away in the mountains of Peru. Just as that gold must be dug from the mine and coined in the mint before it is available for use, so must thought be separated from the chaos of the unintelligible, and embodied in words before it becomes a power either for good or for evil. It must take a form we can lay hold of, before it can lay hold of us. Only realities can grapple with realities.

From this view how supremely foolish the teaching that there is a subtle and incomprehensible mode of communication between mind and mind, and between God and the soul! The whole fabric of skepticism falls to the ground, though its colossal form has filled the whole earth and hidden from the gaze of longing multitudes the mount of God. Reason is restored to her rightful throne with all her power and prerogatives. The confines of her kingdom are distinctly marked, reaching neither into the dark domain of superstition, nor into the sterile regions of unbelief.

As language is the life of the individual, so it is the history of a nation. It proclaims aloud, in terms that can neither be unheard nor mistaken, the character of the people by whom it was spoken. Destroy their historical records, yet give us their language, and we can behold there a picture of mind far more delicate in its touches, and more nearly perfect in its execution, than any delineation of form by the great masters of art. This must be evident, since through this medium the thoughts and feelings are recorded which indicate the qualities of mind and the direction of life, and those qualities which are the more strongly marked in the men are the more clearly stamped upon the speech.

Language not only directs the private life and reveals the private character, but it shapes the religions and philosophies of the world. In the same ratio that men have advanced in perfecting, fixing, and refining the art of speech, have their beliefs become more

definite and their worship more rational. With this advancement civilization has kept equal step, and truth and justice have been more fully and firmly established. With it, too, all the tender and latent impulses of the soul have been called up, analyzed, and enjoyed. Man has been made to realize his nobility, and to know the divine attributes of his nature. By means of language the world has been subdued and will be governed. By the same means men, ruder and fiercer than the famishing lion whose wild roar echoed from the walls of the Coliseum, have been made the children of God and the heirs of heaven. It has won more trophies, conquered more cities, founded and destroyed more empires, than all the clash of arms or the thunder of battle. "It has awakened emotions in the human heart, and kindled raptures in the soul, that, rising to Heaven, have caused the earth to tremble under the knees of adoring saints, and brought angels down on missions of mercy to mankind. The piety of the saint and the zeal of the martyr have, under its hallowed influence, achieved the most splendid victories inscribed on the rolls of time, and have effected revolutions and deliverances on (the) earth that have caused enraptured silence among the adoring legions of the skies."

Eulogies without number have been written upon it, but who, in his happiest moments and in his loftiest strains of admiration, has equaled the transcendent theme? Poets, sages, philosophers, and fabulists have praised its ineffable powers, but none have risen to that sublime height for which the subject calls. But we need not the song of the poet nor the voice of the fabulist to sound its praises. We need but the great fact that it has been the minister of redemption—that it has given birth to hope, glorious and immortal; hope about which cluster the beauties of life—hope that is the anchor of the soul—hope that shall nerve the trembling heart when it passes the dark valley. And when the shadows are gone, and the pure light of day comes in, language will yet be that sublime machinery by which God will bring the glory-wreathed throng nearer and nearer to Himself, and unfold to them joys unalloyed, unfading, and eternal.

M. J. FERGUSON.

DISCUSSION ON IMMORTALITY.

DR. TRALL REVIEWED.

ED. PHRENOLOGICAL JOURNAL:

DEAR SIR—I have just read Dr. Trall's article, "Immortality Considered Physiologically," in the March JOURNAL. I am pleased with the article. Dr. Trall reasons well, I think. But it appears to me that the latter part of his argument is weak. When he reaches the point where he argues that the special "moral" endowment of man's nature is a distinct proof of the immortality of the soul, I think his argument fails. He tells us that the spiritual group of human powers is the only philosophical basis for the doctrine of immortality, and furthermore, that "vitality and mentality serve the varied purposes of *this* life, and are all the powers needed or useful for an existence which is to terminate with the death of the body."

Is this true? It seems to me that his previous argument with the scientist refutes the idea that the spiritual group of faculties furnishes the only philosophical basis for the doctrine of immortality. He tells the scientist that, "If matter is uncreated and indestructible, and only individualized in form, so is soul. This is individual in persons. Both are immortal and eternal—one as matter with physical properties, and the other as living beings, with vital and mental properties." Is not this an argument that immortality inheres in the "vital and mental properties" of beings, in these properties independent of the more spiritual properties?

I admit that man's spiritual faculties help him to have faith in the immortality of the soul. They furnish the observatory through which he looks upon man's nature, and are essential in our attempt to find the *rationale* of the doctrine of immortality. But if Dr. Trall's aforesaid statement is true, that not only matter is indestructible, but the vital and mental properties are likewise, I do not see that the organs of "Hope, Conscientiousness," etc., which distinguish man from the lower creation, necessarily prove, and are the basis of the doctrine of the soul's immortality.

In regard to the second point to which I have referred, that vitality and mentality are all the powers useful in our present exist-

ence, if this is our only life, I would say that I take a very different view. If this life is all that we may have, is it not good to be hopeful when dark clouds overshadow us? Is it not good to be conscientious in all our dealings with our fellows? How shall this present life of human beings be improved, except we hold before us an ideal of life superior to our present attainment? Is it not good to be benevolent here? Surely, that we may extract the highest good, and realize the greatest happiness as human beings of earth, the spiritual faculties contribute much.

This life is real, and goodness, fraternity, the highest possible state of excellence in character, are things of intrinsic value here. They are to be valued for their inherent worth in our present life and relations. They are conditions upon which man can realize high happiness in earth. Not a little do the spiritual faculties help man to these attainments.

I send these few thoughts, suggested by Dr. Trall's article, thinking that if he could look them over, he might "clear up" his position. I do not know his address, but perhaps he is frequently in your office, as he contributes often to the columns of the JOURNAL, and also to those of *The Science of Health*. I hardly think my comments are worth printing, but you may do what you please with them. Yours, very truly,

GRANVILLE PIERCE.

THE REVIEWER REVIEWED.

The objection raised by Mr. Pierce, that the moral and spiritual *powers* (not "faculties") are useful for the purposes of this life, independent of any existence hereafter, is certainly plausible. But I think a little deeper reflection on the subject will "clear up" my position. I admit to any extent that Mr. Pierce is disposed to claim, that fraternity and good are intrinsically valuable, and that it may have been better for us to possess moral organs, even if our existence is to terminate when the body dies.

But God and nature are never at fault. They not only "do all things well," but in harmony with ulterior designs. Whatever is best for the condition and final destiny of

any living thing, inheres in its organization as a constitutional endowment. The plant that perishes with the season has vital properties adapted to a season's existence. The animal that, during the geological period when vegetation is redundant, lives only to transform the vegetable kingdom more rapidly to its original elements, has all the vital and mental powers necessary to that end, *and no more.*

Why did not beneficent Nature, or a kind Providence, endow the animals with moral and spiritual organs? Would not the possession of these organs conduce to their "highest possible attainment of excellence" in this life? If moral and spiritual organs are essential or important to, or intended for, a life which begins and ends on earth, why are the beasts of the field, the fowls of the air, and the fishes of the sea not endowed with them? What objections could they

reasonably make to being better and happier? Surely fraternity, goodness, excellence of character, etc., are not to be despised by the elephant, whose days are half a century, the insect that lives only through the summer season, or by the infusoria, whose brief existence is measured by the fragment of a second.

But the all-important fact is, that man only is endowed with moral and spiritual organs. And if there is design on the part of Providence, and order in Nature, this fact means something. What *does* it mean? One solution of the problem is found in the theory that human beings are destined to immortality in his personality, while all the living organisms below, that are destitute of moral and spiritual organs, are merely subservient to his purposes, and are, after a brief existence, destined to return to their original elements.

R. T. TRALL, M.D.

PLANT LIFE IN OUR TERRITORIES.

I HAVE been asked the question, how is it that the plants of the plains are found in such arid and apparently uncongenial soil, when they could select a more generous loam elsewhere? In reply, there seem to be two antagonistic principles in regard to the fitness of vegetation to the localities which they inhabit. The advocates of one of these insist that Nature, who watches over the life of every little plant, places each where it is best adapted to thrive, and that some inherent power, unknown to us, guides it aright to the spot where it may raise a future progeny to perpetuate its race.

The other class of thinkers knock all these beautiful theories down by a plain, practical course of reasoning.

They assert that Nature is a hard mother; that she takes little thought for the morrow; that millions of seeds are annually planted where they can not germinate; and that it is by the merest chance that a comparatively small number of young seedlings reach maturity. There is much truth in the latter view of the subject, and yet it will be well for us not to ignore wholly the former.

To illustrate our meaning more clearly, let us examine the rhododendrons and kalmias, two genera of evergreen shrubs, found almost

exclusively in shaded, moist localities, and, for the most part, on northern aspects; hence it has become the fashion to say that these plants delight in shade and moisture, and that they will not thrive elsewhere. This, however, is all a mistake, and a prominent botanist, Thos. Meehan, of Philadelphia, was the first to clearly explain the problem.

He says that the minute seeds, which are among the most difficult to germinate, and the young seedlings which will only thrive under certain conditions, find in the shade precisely the requirements needed; but, that after the plants have gained sufficient strength, they will prosper as well in the full rays of the sun as if under a leafy canopy. Now, Nature, in her usual "hit-or-miss style," says our matter-of-fact author, scatters just as many seeds where they perish, as she does where they germinate, consequently she has no care in the matter.

We are again reminded of this fact when we observe the giant oak loaded with its bushels of acorns in the autumn, but should we examine the vicinity during the succeeding season, we might not possibly find a single young plant. Why, if Nature is so watchful over her darling pets, does she permit this?

All these seeds go toward sustaining animal

life, and thus, to be sure, great good is accomplished in other ways; but the only result in perpetuating its species is with the aid of the squirrel, who, on his way to his winter hoard, drops the acorn in a moist, shaded spot, and the ensuing spring, with its gentle showers and mild air, starts it into active life.

And this brings us to the territorial vegetation. Prominently, all over the plains, may be seen the different species of cactus, but all are alike in one essential characteristic.

They can store away sufficient moisture in the cells of their huge succulent stems to last for an almost indefinite period, and here, too, our theory comes up. The seeds of these will not succeed if dropped in moist places, nor would the young plants live even if such was the case. Contrary to the usual custom of vegetable life, the seeds and young plants of *cacti* require a dry, sandy soil, and an atmosphere destitute of moisture; and the plains furnish these requisites. The *prickly pear*, a genus belonging to this natural order of plants, has been proven by actual experiment to grow far more luxuriantly with moderate moisture than where it is dry; although, in the former, the seeds would rot, and in the latter they would retain their vitality.

But we also notice the type of the garden sun-flower (*helianthus annuus*) wherever we go—along the railroad track, over the cultivated fields, and, in fact, wherever the seeds can find sufficient encouragement to germinate. And this, too, is easily explained. Many plants, like the one above mentioned, are not at all particular as to choice of location; neither are their seeds difficult to sprout.

The sage bush of the plains, repulsive alike to sight and smell, furnishes another striking example of this character. They grow just as well, and, indeed, better on rich ground than on poor; but their seeds succeed best in dry, parched-up soils, where everything else almost perishes. Therefore, very little depends upon the likes or dislikes of the plant, for the peculiar choice of location, inherent in the seeds, proves the governing power after all.

As we follow the winding course of some mountain stream, we notice a number of species of plants peculiar to such moist surroundings, although but a few feet distant from the stream itself, not a plant can be detected; and yet I have frequently transplanted such into my garden, where they would thrive luxuriantly in ordinary dry soil. The cause for this apparent mystery is very simple, and goes to prove our former course of reasoning.

Seeds of these semi-aquatic plants will not germinate unless the earth is liberally supplied with moisture; yet the seedlings, after gaining age and strength, will live anywhere.

Take, as another striking example, the exact reverse of these—the so-called alpine or rock plants, which we find abundant in the dry, parched interstices of the rocks, and nowhere else. It is not because they will not live elsewhere; for, if we undertake their cultivation, we find they will readily accommodate themselves to their new homes with a certainty of success; and that, too, even where the soil is wet and apparently uncongenial.

We observe that many plants of this nature, such as the mountain pink, talinum, arrow-leaved violet, bird's-foot violet, etc., will visibly increase in size and health by such a change; but, when we endeavor to grow their seeds in moist places, we may look in vain for favorable results. So that when we hear people assert that certain plants will not succeed beyond the limits of special localities, or in peculiar soils and atmospheres, we may well ask the question, whether or not such have had a fair trial, and if the prevailing fault does not lie in the seed to begin with.

This being the position that I have endeavored to maintain, I may add, as additional confirmation, that all my observations and experiments point undeviatingly to this end.

Another, and a very beautiful feature in the mountain vegetable, is the increased intensity of color in the flowers, and the consequent decrease in the size of the plants, as we ascend to the higher elevations.

This, of course, is attributable to the rarity of the atmosphere, and the low temperature during the night, all summer long. It is, indeed, a beautiful study to select some particular plant, and watch it from the base of the mountain, until we arrive at the limit of vegetation. A good example of this may be found in the *mertensia*, or lung-wort, a plant with very showy blue flowers, found quite abundantly on the sides of Gray's Peak.

At the commencement of our upward journey, we notice that it is about two feet in height, and the color a pale blue; but the hue becomes deeper and deeper, and the plant smaller and smaller, until we reach the topmost point of the peak, where it may be detected, scarcely exceeding two inches high, with its tiny blossom of a dazzling ultramarine tint. That this is not the normal condition of the plant itself, but merely a consequence of the peculiar thinness of the air of the mount-

ain region, may be ascertained by removing these plants to the gardens of our eastern homes; they then return to their natural habits, and speedily forget their early education.

A noticeable character in the arboreal vegetation is, that with the increase in altitude, is noticed a corresponding increase in the size of the trees. Following the same route above alluded to—the ascent of Gray's Peak, and we find on the numerous mounds at the base a number of small-sized evergreens and shrubby oaks; as we rise higher, however, these give place to a more stately growth; and this increases until we reach the last trace of tree-life, where we find the *Engelmann's spruce*, which is by far the largest of all.

And so it is on the Sierra Nevada of California. On the Foot Hills the vegetation is limited to stunted and gnarled specimens of oaks, a low-spreading pine (*P. Sabiniana*), numerous dwarf shrubs, and that is all; but, as we journey upward, soon the surrounding

vegetation assumes a more dignified aspect; the trees and shrubs we started out with are seen no more, and in their places are pines and firs of a majestic size.

Even as we go up still higher, the size of these conifers increase in girth and height, until their proportions become perfectly enormous—so immense, indeed, that it is difficult to realize how large they really are, without the aid of measuring line.

These are curious facts, which go to prove that rarity in the atmosphere is congenial to tree-life—adding, as it were, charms that we dwellers in the lower altitudes can never hope to possess—not only in color, but in density, regularity of form, and all else that combine to form a perfect specimen. Therefore we assume that no one has seen an evergreen in all its beauty, who has not toiled up the long and weary trail that leads to the top of the Sierras of California; and to enjoy such a glorious treat fully repays for the weariness resulting from such a journey. JOSIAH HOOPES.

A HANDSOME MURDERER

WHAT! can it be that one may be comely and yet be a murderer? May one have a tolerably symmetrical face and very



EMIL LOWINSTIEN.

bad head? Aye, we have met such persons in and out of prisons, and of both sexes. As a rule, however, one usually carries his real

character in his face, disguise it as he may. Shakspeare notes an exception when one of his characters says—

“Why, I can smile, and murder while I smile;
And cry content to that which grieves my heart,
And wet my cheek with artificial tears,
And frame my face to all occasions.”

This young man, of foreign parentage, had received little or no education; had learned the trade of a barber; had associated chiefly with only worldly—not to say with irreligious—men; had been much complimented for his beauty, especially for his black and curly hair; was ambitious to show off to advantage, and had an avaricious mind. The love of money with him was, indeed, “the root of all evil.” It led him on, with his consent, to murder and to death.

The points in this character may be summed up in a few words. He had a small head, largely developed in the selfish or animal propensities, while the moral or religious sentiments were weak, and without much restraining influence. He was vain and ambitious, seeking only personal pleasures, without regard to consequences; and supposing he could murder and rob his poor one-armed

victim, and escape with the sum of a few hundred dollars, he made the attempt; was discovered, tried, convicted, and executed.

Mr. F. E. Aspinwall, a young and ardent phrenologist, of Loudonville, near Albany, N. Y., visited the prisoner, and made an examination. He says, in a note to the editor:

Through the kind assistance of the Rev. Frank R. Morse, of Albany, I was permitted, on the 5th of March, to see Emil Lowinstien in his cell, and make an examination.

The quality of his organization was excellent, the temperament inclining him to activity and much excitability, although he possessed organs rendering him very positive and capable of concealing his true feelings. The development of the different parts of the brain was much out of proportion, the organs of the selfish propensities being decidedly predominant. Conscientiousness and Benevolence, though fairly developed, were not sufficiently strong to balance his selfish nature. Destructiveness was the largest organ in his head; hence I inferred that he had marked severity of disposition, amounting even to cruelty, and conducing to the disposition to take life when greatly excited. His Acquisitiveness was also large, rendering him more liable to yield to temptation.

His head was relatively very high at Firmness, and from this point to Benevolence sloped downward quite rapidly, indicating strong Firmness and comparatively weak moral and religious sentiments. Cautiousness was evidently subordinate also. Hence I concluded that he would decide quickly upon a course to be pursued, without being sufficiently mindful of consequences, and be inclined to carry out his plans without much thought of the difficulties in the way, or consideration for the advice of friends. He was more secretive than honest, more selfish than liberal, more cruel than kind; in a word, was sadly unbalanced. The intellectual faculties were but fairly developed; he had some mechanical talent; memory of forms and faces was one of his strongest faculties. Good training and advantageous surroundings would doubtless have given him a better chance to make life a success, as there was intellect enough, and sufficient moral sense in him, to warrant effort in their development.

The photograph is rather flattering, and indicates better health than he had when I saw him.

Lowinstien was short, full-chested, and weighed about 140 pounds. He had dark, curly hair, restless black eyes, and a large nose of the Roman type. He was born in January, 1850, near Madgeburg, on the Elbe, Prussia, and came to this country with his parents when about eighteen years of age. He has lived in Philadelphia and New York, and was a barber by trade.

He died protesting that he was innocent. Innocent or guilty, his phrenology indicated that he was capable, at least, of committing the crime for which he was executed.

THE OCTAGON IN CENTRAL PARK.

IN response to an inquiry, we print the following sketch with regard to one of the most interesting features of our great and beautiful public Garden, the New York Central Park:

On an eminence overlooking the principal lake in that Park, and a couple of hundred yards from the Seventy-second Street entrance, the commissioners have erected a wooden structure, known from its shape as the octagon. It would stand in a square of about fourteen feet. Numerous funnels jut out from the sides, straight or L shaped, with the orifice downward. These are for ventilation. There are two doors, but no windows. The octagon stands on a platform, and is approached by steps. As you enter the door, you see before you a round white table, about the size of an ordinary card-table. In the center, overhead, is a cylinder that resembles a piece of stove-pipe. A metal rod, like an elongated car-hook, hangs from this within the reach of a man's hand. This octagon is the home of the camera obscura, the only one of its kind in this country. It has been in operation for some time, although the fact is known to comparatively few.

Recently a *Sun* reporter visited the octagon. The courteous gentleman keeper invited him to enter. He did so, and the door was shut. All was dark except the surface of the white table. Upon it was depicted a most beautiful landscape, with men and women walking about, children and dogs frisking, and horses trotting along at a brisk gait. The scene was at once recognized.

A perfect picture of the Park to the south of the lake was spread out upon the table. A movement of the rod brought another section into view, and by and by New York city, as far down as Twentieth Street, was distinctly flung in miniature upon the table. Still another movement, and Hoboken and the Palisades were presented. The Eighth Avenue cars rolled along on one side, and the steam-cars rattled past on the other. The spoke of every wheel and the face of every passenger were clearly marked. Every color and tint of the foliage was there, and the slightest waving of a leaf was faithfully represented. Every portion of the Park not shut off by some physical obstruction, was in turn reflected, and the attitude and motion of each person, walking or seated, was distinctively seen. The camera produced upon the table a series of pictures most beautiful and startling, the moving figures—approaching, receding, crossing—making it seem like a glimpse of fairy land.

As may be well supposed, the camera has yielded some surprising revelations to the gazers. A New York detective, who has several times made use of the camera for professional purposes, accompanied the *Sun* reporter in his visit to the octagon. The detective related some interesting stories connected with the camera.

Toward the close of March, an elderly gentleman, a professor of a well-known college, visited the octagon, accompanied by a detective. Scene after scene was brought into view, until at last a distant part of the Park was shown. Walking down a pathway in the center of the picture was a couple. The elderly gentleman at once recognized the lady as his daughter, and the gentleman as the young artist with whom she had eloped two days previously.

A lady residing in Fifth Avenue visited the Park with two friends, accompanied by her little boy of four years. While the lady and her friends were chatting together in an arbor, the child strolled away; and when the alarmed mother became conscious of the fact, he was nowhere to be seen. Search was made in every direction by the lady and her friends, but to no purpose. At length an officer, who was consulted by the distressed woman, directed her to the octagon. Thither she and her friends went. The camera, like a good angel, went to work to disclose the whereabouts of the lost boy, and in a few minutes a small white speck was discovered in the sheep pasture.

"That's most likely your child, madam," said the expert in charge of the camera.

The lady examined the speck carefully, and there, sure enough, was her darling, every feature and limb discernible, lying curled up on the grass, fast asleep.

FAULTS IN ELOCUTION.

EXCESSIVE vehemence of utterance and its opposite fault, an indolent indifference, have been considered in a previous paper. Aside from these are numberless mannerisms or peculiarities of speech, posture, and gesture which it is the province of elocution to correct.

Bishop Berkeley once suggested that half the learning of the land was rendered useless by neglect of attention to pronunciation and delivery in early education. The glory of man is speech, as the good George Herbert has said, and therefore, he argues, "nothing is little in God's service." We have an innate sense of fitness to which speech and action should conform, but this is violated by those oftentimes whose literary taste in other respects is almost faultless. Thompson once read his "Seasons" to a friend in private. The gentleman, after listening awhile, snatched the MS. from the poet's hands, because he could no longer endure the murderous mutilation of beautiful sentences by wretched reading. We have had similar feelings in listening to scripture and hymn-reading. Nasal tones, upward inflections and a sing-song marking of the rhyme, the cæsural pause or poetic feet torture a cultivated ear. Add to these a stooping posture, a swaying of the body to and fro, shrugging of shoulders, hands in the pockets, nervous grimaces of the face, eyes turned to the ceiling, or to nobody in particular, aimless gestures and other infelicities of manner, and you have a picture true to life. An English writer, Daniel Moore, says, "We fear it might be said to many who boast that they never had recourse to

"The start theatric, practiced at the glass;"

the greater pity that you never had. For if some of your gestures and grimaces had been practiced there, we feel sure they never would have been repeated anywhere else, instead of being visited as they are every week on your congregation, patient under the infliction, and helpless in their disgust."

The true desideratum in speech or action is *naturalness*. But we must not mistake habit

for nature. They differ as much as art and artifice. We say a man naturally drawls, when we mean that he has acquired the habit. It is a second nature, but not true nature. Self-observation and patient watchfulness, the criticisms of a friend, and the drill of a teacher are required to rid one of the faults specified. The unstudied tones and gestures noticed in the street are very suggestive, as are also the public efforts of acknowledged masters of oratory. Effective speech, in the last place, depends largely upon practice in writing. Elocution and rhetoric are really inseparable. Condensation, purity, perspicuity, and elegance of diction depend on thorough drill in the commitment of thought to writing. Not only are weak repetition and vapid thought eliminated by writing and rewriting, but smoother sentences are formed, easier spoken, easier remembered.

As the cuttle fish, when pursued, escapes by hiding in an inky cloud emitted from its own body, an ill-prepared speaker sometimes tries to hide his poverty of thought in a mist of words, or a volume of sound. But while the pen is an indispensable ally to the orator, he

must never come under a servile bondage to notes, those paper crutches without which some speakers are helpless. Appeals which are *read* to people, "coldly correct and critically dull," can not move the heart as those that are spoken directly to them without the interposition of such a barrier.

Failure may attend the first attempt at emancipation, but speaking to mortification is a good preparative to speaking to edification. Sheridan's complete failure in the House of Commons led his friends to advise him to give up the idea of becoming a public speaker. His indignant answer was, "*Never* ; I know it is in me, and I am determined that it shall come out." Out it came. After his speech on Warren Hastings an adjournment was moved, for, said Pitt, they could not come to a sober judgment, being so under the wand of an enchanter.

It is the first step that costs, but it repays all the cost in the freedom enjoyed, the attention secured, and the impression made. The most persuasive style is that of dignified colloquial address, in which the naturalness of conversation is united with that energy and elegance of language which is the direct result of previous preparation.

E. P. THWING.

A NATURAL ARTIST IN THE VIRGINIAN WILDS.

IN a secluded spot, amid the romantic mountains of Virginia, your humble servant has recently stumbled upon an extraordinary anomaly in human nature, viz., a negro artist and sculptor, who, though at present residing in comparative obscurity, earning his "hog and hominy" by the sweat of his brow in the unclassic tobacco-patch, is destined, we opine, to wear "the immortal laurel wreath" upon his kinky head.

Without ever having had any instruction whatever in the fine arts, this gifted negro boy would even now do honor to the studios of the "Eternal City." Prior to the surrender of Lee, this remarkable lad was the slave of a distinguished Virginia politician, who lived in this county, and it was at the residence of his former master that we first beheld evidences of his genius. On the interior of a large barn, we were shown his drawings of a circus and menagerie, which, considering the history of the artist, and the nature of his materials, were, to say the least, wonderful! Horses and riders, gymnasts, acrobats, clowns, etc., in the endless variety of costume and position, common to the saw-dust arena, were there. Ani-

mals of every clime in creation, from an elephant, and old John Robinson's white camel, to the most insignificant ape, were there; some reclining at rest, some eating, some playing, some performing in the ring, and some exhibiting symptoms of violent rage. With rough pine plank for a canvas, and his first finger for a brush, and fire-coals, ashes, soot, chalk, brick-dust, etc., for paints, our hero had there described animals, only seen once or twice, at itinerant exhibitions, in a manner that might have won a compliment from Edwin Landseer. We must not omit to mention the "band-wagon," which formed an interesting feature of this picture-gallery of his. The gilded chariot, constructed in the shape of a bird, with its load of musicians, in uniform, each bearing his respective instrument, and the twenty-six horses proudly tramping in their gorgeous trappings, were masterly executed. On another canvas (?) we were shown a tiger, leaping from a cliff. With jaws distended, mouth foaming, and eyes glaring, the ferocious beast is depicted so as really to terrify the beholder. Many trees in the neighborhood of his former, and his present, home have

been peeled by his hatchet, and made to bear excellent drawings of the fierce denizens of the forest. Not only are his drawings of animals correct in outline, but, by an ingenious way of combining the rude materials at his command, he succeeded in exactly imitating their color, and, what is more wonderful still, he portrayed their *expression*, in composure or excitement, with the vividness of a master hand. Another evidence of extraordinary ability we see in the fact that many of his pictures are painted in bold relief—the figures apparently standing out several feet from the background. We have critically examined some of his drawings of animals, and find no imperfections, even to the intricate and delicate shading of the interior of their hoofs.

The originality of the artist is shown in the peculiarity of his system. We have never seen him at work, but from an unfinished painting of an elephant, we find it his plan to begin by drawing the hind feet and posterior part of the body, and then proceeding forward, leaving the head for the last. This is the reverse of all ordinary rules in sketching, and it is strange that by such means the proper proportions can be preserved. In carving, this youth is equally dextrous. With a common jack-knife he cuts from wood and stone striking representations of the heads of beasts, birds, and men. He takes much interest in machinery, and seldom sees a machine without being able to describe its most complicated contrivances, and can comprehend and explain the utility of their movements. When quite a child, he once carved a robin in wood, and painted it, for a young master. The gentleman praised it, as it deserved, but intimated that its breast was not red enough. "Then," said our hero, "I'll make it red enough," and, pricking his arm with the point of his knife, he stained the figure with his own life blood.

Before he had learned his alphabet, his master discovered him one day engaged in copying the large printed heading of a newspaper. He succeeded admirably, although both copy and imitation were inverted during the process. It was the intention of the late Daniel Hoge, his former owner, to give him educational and art advantages, but certain unfortunate circumstances will prevent assistance from that quarter. We are glad to know, though, that certain parties are instituting measures to send him to Hampton (Va.) African Normal Institute, where, if he displays a desire for improvement, his future advancement will be secured.

HANS RUPPEL.

THE MONTH.

IMPORTANT EVENTS WHICH OCCURRED IN JUNE.—John Randolph, of Roanoke, born June 2, 1773; Sir John Ross, Arctic explorer, born June 24, 1777; Battle of Fair Oaks, 1862; Battle of Cold Harbor, 1864; Weber died, 1826; Mohammed died, 632; Charles Dickens died, 1871; First Deaf and Dumb School, 1773; Sir John Franklin died, 1847; Dr. Arnold born, 1796; John Wesley born, 1703; Battle of Waterloo, 1815; "The Alabama" sunk, 1864; Telegraph to India opened, 1870; Battle of Solferino, 1859; George IV. died, 1830; Cromwell a Protector, 1659; Cholera in New York, 1832; Henry Clay died, 1852; Printing invented, 1441; Battle of Bunker Hill, June 17, 1775; Henry Ward Beecher born, June 24, 1813; L. N. Fowler born, June 23, 1811; Roebling born, 1806; Gen. Robert Anderson born, June 14, 1805; Gov. Calvert, First Governor of Maryland, born June 9, 1647; Rev. Alex. Campbell born, June, 1786; "Poor McDonald Clarke" born, June 18, 1798, died, 1842; Capt. Nathan Hale, Rev. Pat., June 6, 1755; Andrew Jackson died 8th June, 1845.

WISDOM.

To tell a lie, thrice the time, talent, and words are required as to tell the truth.

WHOEVER makes the truth appear unpleasant, commits high treason against virtue.

By silence we may learn the imperfections of others, while others do not learn ours.

A MAN who can not mind his own business is not fit to be trusted with the king's.—*Saville*.

SIDE by side of plain truth stands common sense—two of the greatest warriors time has ever produced.

OUR most indifferent actions have the impress of individuality; we may convey an unconsidered word or gesture.

It is not miserable to be blind; he only is miserable who can not acquiesce in his blindness with fortitude.—*Milton*.

LABOR is the law of the world, and he who lives by other means is of less value to the world than the buzzing, busy insect.

FIGHT hard against a hasty temper. Anger will come, but resist it stoutly. A spark may set a house on fire. A fit of passion may give you cause to mourn all the days of your life.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

WHEN the enterprising butcher's boy "set up on his own hook," did he find a comfortable seat?

"I TAKE my tex dis morning," said a colored preacher, "from dat portion ob de Scriptures whar de Postal Paul pints his pistol to de Fesians."

THE woman who made a pound of butter from the cream of a joke, and a cheese from the milk of human kindness, has since washed the close of a year, and hung 'em to dry on a bee line.

THOMPSON is not going to do anything more in conundrums. He recently asked his wife the difference between his head and a hogshead, and she said there was none. He says that's not the right answer.

A YANKEE down-east newspaper says, "Without intending to be personal, we feel bound to declare that if our postmaster would resign, many timid persons would feel safer about their money-letters."

A MUSICIAN, George Sharp, had his name on his door thus: "G Sharp." A wag of a painter, who knew something of music, early one morning made the following undeniable and significant addition: "Is A flat."

AN Ohio youth, who desired to wed the object of his affections, had an interview with her paternal ancestor, in which he stated that, although he had no wealth to speak of, yet he was "chock full of days' work." He got the girl.

A PHILOSOPHICAL sufferer advertised: "If the person who took a fancy to my overcoat was influenced by the inclemency of the weather, then, contrary to the weather, all is serene; but if he

did so from commercial considerations, I am ready to enter into financial negotiations for its return."

FORWARD and loquacious youth—"By Jove, you know, upon my word, now—if I were to see a ghost, you know, I should be a chattering idiot for the rest of my life!" Ingenuous maiden (dreamily)—*Have you seen a ghost?"*

SCENE in Chemistry: Student attempting to recite, but wanders strangely from the subject. Professor interrupts and gives a long and lucid explanation. Student listens attentively, and at its close, throwing his head back in the direction of the phrenological organ of Self-Esteem, modestly replies, "Yes, sir; yes, sir; you get my idea."

DURING Colonel Tom Scott's recent visit to St. Louis, according to the *Globe*, he was hailed on the street by a little bootblack: "Boss, have yer boots shined?" The Colonel pleasantly shook his finger at him, saying: "My boy, I am no boss." The little waif swung his box over his shoulder, and eyeing the great railroad king from head to foot, replied: "You're boss of yer own boots, ain't yer?"

At a recent examination for admission to Bowdoin College, the written papers of geography contained the following: "Iterly" for Italy, "Merrymac" for Merrimac, "Pernobscot" for Penobscot, "Florady" for Florida, "Mississuri" for Missouri, and "Nareganset" for Narragansett. The Catskill Mountains were credited to Vermont by one writer, by another to Pennsylvania; the Alps to Asia by a third. Stockholm was set down as the capital of Holland; Berlin of Spain. Geneva was transferred to Italy; the Rhine was said to flow into the Atlantic; the Danube into the Baltic.

Our Mentorship Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

SIZE OF BRAIN.—I have a son two years old, delicate physically, whose brain measures nineteen inches in circumference. Is his

brain too large for his age and physique, and what should be the size of the brain for a healthy child of two years of age?

Ans. We often find the heads of children two years of age nineteen inches in circumference. Sometimes they are large around, but not very high, so that the brain mass is not remarkable. A low brain is more likely to be connected with a strong and sturdy constitution, while a high head, large in the front and top, is more likely to attend one who is of slender constitution. In fact a brain of this sort is apt to absorb the vitality, and render the body weak. Such children should be fed on articles which tend to develop the physical system. They should not use fine flour bread, rice,

sweetened puddings, pies, cakes, or sugar and butter, to any considerable extent; but they should have oatmeal, good milk, fruit, cracked wheat, beef and mutton, eggs and fish. But pork and gravies and pastry do not make muscle, or bone, or brain. Remember that the young animal lives on milk, which is complete food, having all the ingredients which the system requires. Wheat, unsifted, also contains all the elements the system demands. Fine flour has lost the material which feeds muscle and brain.

HOW TO LEARN PHRENOLOGY.—What are the best books for the study of Phrenology, and what season of the year do you give instruction in Phrenology to classes?

Ans. Every book on our list is useful to him who would make himself thoroughly acquainted with Phrenology. Some books are more devoted to the first principles, others to the application of the science to education, self-culture, personal improvement, the training of children, the choice of pursuits, matrimony, and the like. Some people ask us why we do not write one book containing everything about the subject. If we were to write one as large as Webster's Dictionary, they might complain that it was too large for convenient handling, and too much a tax on their purse. They would then call for something small, convenient, and right to the point.

We have a circular giving a list of all our publications on Phrenology, and it contains also what we call the "Student's Set," which we sell for ten dollars. The same circular also contains a full account of our mode of instruction to classes, which assemble in the fall. On the fifth of November our next class will commence. These circulars will be forwarded to all who may write for them.

HOW TO MAKE THE BEARD GROW.—Beardless boys and young men are impatient to have the external marks of manhood. Seeing this, graceless scamps, quacks, and impostors set traps and catch numbers of them. Here is one of the advertisements well calculated to extract the "stamps" from foolish young men:

"THE SECRET OUT.—One package of Prof. — Magic Compound will force whiskers to grow thick and heavy on the smoothest face (without injury) in 21 days, or money refunded. 25 cents a package, post-paid, or 3 for 50 cents. One application of my "Hair Curler" will curl the hair of either sex beautifully [and kill it]. Satisfaction guaranteed. 25 cents a package, post-paid; 3 for 50 cents.

As though something rubbed on the *outside* would make hair grow from the *inside*. When farmers wish to fertilize plants, they furnish food for the *roots*. On the same principle, to make the hair grow these young men should *swallow* a few bottles of hair-oil. But the thing is simply a fraud, and those engaged in the deception ought to be set to picking oakum. The best thing to make the hair grow, where nature intended it should grow, is to eat plain, simple, and healthful food, and to keep the body and mind sound and pure.

One cause of beardless faces in men may be certain nameless transgressions, which stop the growth, not only of the beard, but also of body and soul.

G. L. K.—Is he a graduate?

Ans. The person you name has not been a member of any class of ours, and is not therefore a graduate from our school. Ask any person who claims to have graduated with us to show his diploma. All who have conformed to the rules of our course of instruction can show such a document, which will tell its own story.

MIND AND BRAIN.—If the mind can not act independently of the brain, what will become of the mind when the body dies?

Ans. People who are not disbelievers in a future state would not be likely to press this question. If you will look at first Corinthians, xv. 35-44, you may get some suggestions that may be serviceable. In this we read, speaking of man, "It is sown a natural body"—that is, goes to death, falls into the ground—"it is raised a spiritual body. There is a natural body and there is a spiritual body." We do not obtain, while in the present life, knowledge of external things without the organs called the senses. No man learns color except by seeing. The ear brings sound to the mind, the nose brings odors, the tongue brings flavors, the hand brings that which comes by feeling; but when the mind has acquired the knowledge of forms and colors by sight, or any other sense, the mind is capable of recalling these knowledges without the use of the eye. The man who becomes blind at twenty-five remembers the bright skies and the beautiful flowers, the fair forms and sparkling eyes, precisely as one can think over the journeys he has made hundreds of miles away. One who has visited Niagara, or who has seen Vesuvius, or the storied castles and cathedrals of the Old World, can recall them to his consciousness without the aid of the organs by which he obtained the knowledge. If, then, the eye, having seen objects, is not necessary to the recalling of those objects, why can not the mind also act independently of the brain when the brain itself shall have gone to dust? When one's eye is made blind, that part of him is practically dead. When any portion of the brain is destroyed, or permanently paralyzed, so much of the man is dead. When the entire brain becomes inactive and useless, he is as good as dead. In dotage the body lives, but the brain has almost ceased to act, and the man is imbecile. Old persons sometimes cease to know their own children, or their most intimate friends. They are dead at the top, only alive in the body. Their mind-power seems to be held in abeyance, and will remain so until they lay off the form and awake to newness of life in the spirit world. When we shall there awake we may be able to see all that belongs to the physical, ourselves being unseen. When we have that "spiritual body," we shall not need wagons and locomotives.

tives and bridges as a means of communication, nor shall we need the physical eyes to enable us to see; as by means of memory, or mind-power, we now can see by recalling things once seen, so we may be able to see by the mind without the aid of such an eye as serves us here.

PLANCHETTE.—In our little work entitled "Salem Witchcraft, the Planchette Mystery, and Spiritualism Reviewed," price \$1, there will be found descriptions, with prices, of the several different planchette machines, through which communications are said to come, by writing, in a somewhat mysterious way. We have our own opinions on the subject, but prefer that others should investigate for themselves. The work on witchcraft is deeply interesting.

WANTS TO GROW TALL.—A young man writes: I have a very great desire to become tall, and would like to know if it is possible for me to become so. I am willing to make any sacrifice whatever. I am now twenty-two years of age, and but five feet seven inches in height. My health is average. If you can inform me how this can be done, I would be most grateful.

Ans. One can not blame this young man for *desiring* to have a manly form. But there are no means by which a five-feet-seven man can hope to become a six-feeter. Could he have chosen of whom to be born, and have selected parents of generous stature, his wishes might have been gratified. We deem it a sad misfortune for children to be born of a dwarfed parentage. Nor is it less so to be born diseased, or of deficient moral character. "Like begets like." This young man of five feet seven should thank God for what there is of him, and endeavor to improve in intellect and moral character. Besides, five feet seven is above the average.

D. OF BOSTON.—We are not aware that we know the person you name.

CUTTING TEETH—SHORT-LIVED.—It is believed by some that when the upper teeth of infants appear first, that it is a sign that it will not live long—not exceed twelve years. Is it true? If so, why? and could anything be done to remedy it? Please answer through your valuable JOURNAL.

Ans. All "signs" are said to fail in dry weather, you know, and we guess it will prove so in this upper teeth cutting, *providing* good care be taken of the baby.

What They Say.

DREAMS—CLAIRVOYANCE.—Four years ago I had a dream that has left a lasting impression upon my mind in regard to the theory of dreams. Now, I want to "write it up" in as few words as possible, and ask you to be kind enough to give it some little corner in the JOURNAL, and allow those "posted" in the mysterious to com-

ment. Upon the nights of March 23d, 24th, and 25th, 1870, I lectured on Phrenology in Deerfield, Ind. After delivering the last lecture I went to my hotel, examined two or three heads, and then retired, and soon went to sleep. I dreamed that a woman, somewhat above the medium height, and resembling no person I knew, came to my bedside and awakened me, whereupon I thought she informed me that "the baby was dead." This had the effect to make me weep and to awake. As soon as I was fully awake, I recollected that the baby, our only child, was not well when I left home a few days before. I felt very restless and anxious for the morning, and to ascertain how long I was to wait, I got up, lighted a lamp, and looked at my watch, and to my surprise found it twenty minutes past eleven. I returned to bed with the thought that it was only a dream, but did not go to sleep for a considerable time afterward, and when I did I dreamed that the same woman that had brought the news of the death of my child came to my bed again, and just as before awakened me, and told me that "life had returned to the child." Again I awoke, and again looked at my watch and found it half after two.

By this time I felt very strangely, for I have never seen a person before or since, while awake or asleep, more plainly, or heard language spoken more distinctly than when I saw and heard the mysterious night visitant.

In the morning, before I left my room, I resolved to go home on the first train, but before train time my brother came and informed me that the child that was the subject of my dream had been very sick, and that it died, as they supposed, *at twenty minutes past eleven* that night, and, as they thought, remained dead till *half-past two*, and then life returned. I went home with him, and found all as he had said, and also on comparing the clock at home and my watch that there was but *three* minutes difference between them. Now, the query is, by what agency was this news communicated, and who was the mysterious person? Will somebody tell us?

J. A. HOUSER.

[Why are the messengers who communicate with us, in dreams, these psychological dispatches usually women? There were visions in old time, as in the new, and woman plays a most conspicuous part in them. Why?—ED.]

SCIENCE IN THE HUMAN FACE.—The editor of the *Prattsburg News*, writing on physiognomy, says: When it is understood that each faculty of the mind has from its location in the brain a minute network of nerves with their several polls centering in some part of the face, giving expression and strength of development to it, we may judge of the foundation this science has in the physical organization.

SOUL STARVING.—A lady correspondent writes us from Minnesota, as follows: *Dear Sir:* I am an old subscriber to your valuable

JOURNAL, but reverses of fortune have caused me to try to do without it for the last three years. I have come to the conclusion that I will not starve my soul any longer; I had rather do with one meal less of victuals a day. Inclosed find two dollars, and send the JOURNAL as long as you can for that; I will try to remit again. J. H.

HOW SHALL THEY BE SAVED?—I read with deep and painful interest the article in your last JOURNAL giving some account of the late Richard Yates. It has haunted me ever since, and I write to ask if some more light can not be shed on this most distressing case. There must be *some good* reason why those manly and desperate struggles with the demon of intemperance were not crowned with success. That temperance address of his is the best I ever read. How noble! how manly! Oh, tell us *why* he fell. Was it not that his good resolutions were formed in *his own strength*? I think so. Many a man has gone on struggling and fighting against this evil habit for years, and never conquered, until he took hold on God's almighty strength by prayer. Just after reading your account, I saw one from a person who had been delivered from the terrible bondage. He says, "I had come to the verge of despair, so that I had purchased poison to destroy myself." At this crisis he was led into the Fulton Street Prayer Meeting. Here he presented a paper asking prayer that God would "help and save him." Here Jesus spoke to his soul, and gave assurance of His aid. Here, too, he heard a man relate a case exactly like his own, who had been completely cured by *going directly to Christ for help*. "This experience was to me," he says, "a voice from heaven. I went to my room, locked my door, bowed before the Lord, and cried for help, and I got it; and, oh, the joy that filled my heart when I felt the assurance!" C. F. P.

COMPULSORY EDUCATION.—The editor of the Madison, Fla., *Recorder*, in commending to its readers a spirited communication on the subject, remarks:

We have been of the opinion for some years that the only way to educate the masses would be by compulsory enactments. Parents not having an education themselves, and "getting through" the world by dint of industry and hard work, conclude from their mode of reasoning that their posterity can do likewise. A more mistaken idea has never crept into the farmer's mind than that education was unnecessary in his vocation. What the people need to look into, is the education of the rising generation, regardless of the pursuit in life to which they are best adapted! Who is to be the judge of their fitness for the different vocations in life? We all know, who observe or think at all upon the subject, that but very few individuals out of any given number select the business or profession to which they are best adapted. And why? Because they do not know themselves—

are not EDUCATED, in the proper sense of the term. Children at the proper age should be examined phrenologically, to correctly determine the point. Every one should know what he is made of—what temperament or temperaments lead off, which greatly assist in forming character, habits, health, for good or ill, and what trade or profession he can best succeed at.

Until physiology, ethnology, and Phrenology become as text-books in our schools and colleges, instead of Latin and Greek, etc., which have outlived their usefulness, will children grow up, to be, and know nothing, comparatively speaking. We have not the space to elaborate our ideas. That the twentieth century will perfect this deficiency in education we believe; we must grope our way in darkness, until the dawn of the day-star arise in the minds of the American people.

ASPIRATION.—Here is what a lady writes about Miss Buckingham's "Self-Made Woman:" I have just finished "Mary Idyl," and feel that in a measure it must be the autobiography of a true life. A man will go through fire and water to ascend a ladder that points to the pinnacle of his ambition; but a woman—why, she will live on air, if need be, and catch the rain of heaven, and make a rainbow out of it to clothe herself with, while the prosperous world will say: "Where does she get her money?" It is full of heart-teachings for rich and poor, and old and young alike. Every school, college, and society library should have a copy of this persevering "Mary Idyl" to encourage those who seek improvement in heart, mind, or body. HOME BODY.

WORDS OF CHEER.—The following is from a theological student in a New England college. We welcome him to this new field of labor and of usefulness:

MY DEAR SIR—Having for the past three years made Phrenology a particular study, read nearly everything ever published on it—*i. e.*, I mean on Anthropology, I propose in June next to make a tour through some parts of the country in the character of a lecturer and practical phrenologist. I have the greatest confidence in the immutable principles of this glorious science, and theoretically, at least, I understand them, it may be, better than any other theory, for I spend more time investigating them.

I write to you as Timothy would to Paul. I shall need *charts*, and other things, perhaps; have you any on hand? Please let me know, that I may procure some.

Phrenology is taking a deep hold upon the younger part of the mental world. It is a leaven in the meal. It tends to restore the excellent science of correspondences. Your "New Physiognomy" is to man what Swedenborg is to the Bible—you restored the principles of interpretation. Persevere, my brother; there is a reward, for you are working in a line with God.

[There is energy, hope, and zeal in these utterances, and we reciprocate his words of encouragement.]

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

PLEASANT TALK about Fruits, Flowers, and Farming. By Henry Ward Beecher. New Edition, with Additional Matter from Recent Writings, published and unpublished. One vol. 12mo: pp. 500; muslin. Price, \$2.50. New York: J. B. Ford & Co.

Here we have the horse of Brooklyn Heights, without his harness on. Indeed, he is "out to pasture." We can almost see him rolling, tumbling, and shaking himself after a hard season's work in Plymouth pulpit. He will soon kick up his heels, give a rousing snort, and away like a shot he will go all round the horizon. Metaphor aside, Mr. Beecher in the pulpit is one thing, and Mr. Beecher on his farm is quite another person. Not that he loses his identity, or becomes somebody else, but that he revels in "pastures new," and gives himself up to growth in health and to a renewing of the vital functions. In this book he takes us with him on the road, in the field, meadow, orchard, garden, in shady nooks, near babbling brooks, where we breathe fully and freely the balmy air of an earthly elysium. Mr. Beecher is a whole-souled human being. He is ahead of his time, and is persecuted by bigots accordingly. What right has he to be more of a man than his neighbors? Let us cut him down to our own small and narrow measure. Jealousy demands it; the safety of the "totally depraved" depends on it; *our* "doxy" will fall unless we pull *him* down.

THE ELOCUTIONIST'S ANNUAL, NUMBER 2. Comprising New and Popular Readings, Recitations, Declamations, Dialogues, Tableaux, etc. Edited by J. W. Shoemaker, A.M., Conductor of the Elocutionist's Department in the *School-day Magazine*, etc. One vol., 12mo; pp. 192; muslin. Price, 75 cents. Philadelphia: J. W. Doughaday & Co.

If we—Americans—fail to become a nation of orators, it will not be from a lack of instruction books. Besides our own excellent manual, "How to Talk," we have others of equal excellence, all going to show how easy it is for one with good health and a good education to become a good speaker. This "Annual" is rich in fine selections.

JOHN ANDROSS. By Rebecca Harding Davis, author of "Life in the Iron Mills," "Dallas Galbraith," "Waiting for the Verdict," etc. Illustrated. One vol. 12mo; pp. 324; muslin. Price, \$1.50. New York: Orange Judd Company.

A poor young man, with talent, he became educated; worked his way up. Easily influenced; misled by designing rogues; he was overcome by a fascinating woman, and came near being ruined,

but finally rallied, and, following the right, concluded his career by returning good for evil. It is a novel of dramatic interest.

THE SERMONS OF HENRY WARD BEECHER, in Plymouth Church, Brooklyn. From *verbatim* Reports by T. J. Ellinwood. Two volumes. Ninth and Tenth Series. Octavo; pp. 482 and 503; muslin. Price, \$2.50 each. New York: J. B. Ford & Co.

Would the reader like to hear this renowned preacher? Distance may prevent. But he can read him, though he may not hear him. And one gets the thoughts, though he may fail to feel the magnetic thrill which a more intimate personal contact would induce. Here are the subjects of half a year's discourses.

CONTENTS OF NINTH SERIES, from Sept., 1872, to March, 1873:

The Duty of Living Peaceably; Faith in Prayer; The True Value of Morality; What is Salvation? "As to the Lord;" The Past and the Future; Moral Honesty and Moral Earnestness; Soul Sight; Exterior and Interior Divine Providence; The Use of Ideals; Earning a Livelihood; Motive of Action; War and Peace; The True Christian Tolerance; The Remnants of Society; Morality not Enough; Unconscious Influence; True Knowledge of God; The Nature and Power of Humility; The Nature of Liberty; The Love of Praise; The Test of Love; Saved by Hope; The Power of God's Truth; Through Fear to Love; Weak Hours.

FIRST ANNUAL REPORT OF THE MORAL EDUCATION SOCIETY, of Washington, D. C. Presented at the Annual Meeting, Jan. 9th, 1874.

The lady managers say this report contains the Constitution of the Society, the reasons for its establishment, and a general view of our work. We hope to see the same work begun and carried on in every State, town, and village throughout our land. Those who would know more of the objects of this society should address, with stamps, either of these ladies, Mrs. Caroline B. Winslow, M.D., President; Lucinda B. Chandler, Hon'y President; or, Ellen O'Conner, Cor. Sec'y, No. 1 Grant Place, Washington, D. C.

PERSONAL RECOLLECTIONS, from Early Life to Old Age, of Mary Somerville. With Selections from her Correspondence. By her Daughter, Martha Somerville. One vol., octavo; pp. 375; muslin. Price, \$2.50. Boston: Roberts Brothers.

This is at once an elegant and an excellent book. If every woman in America would read these beautiful "Recollections," they would be moved to higher and holier motives than those which now actuate many of them. The publishers deserve special thanks for the excellent style in which they have performed their part.

THE CLIONIAN MAGAZINE, of the College of the City of New York. S. I. Samuels, Editor. \$1 per year. No. 1, Vol. I., February, 1874.

The *Clionian* issues no prospectus, gives the name of no publisher, nor the address of the editor. It is a college journal, and may be supposed to represent a close corporation.

THE WESTERN LANCET, a Monthly Journal Devoted to Medicine, Surgery, and the Collateral Sciences. Edited by R. Beverly Cole, M.D., M.R.C.S., Eng., Professor of Obstetrics and Clinical Diseases of Women, University of California. Octavo; pp. 50. Terms, \$3 per year in advance. Vol. III., 1874. San Francisco: Cubery & Co., publishers.

The March number contains an interesting case, illustrated by photograph, of skin grafting, which should be read by all physicians and surgeons.

THE CIRCUIT RIDER: A Tale of the Heroic Age. By Edward Eggleston, author of "The Hoosier Schoolmaster," "The End of the World," etc. Illustrated. One vol., 12mo; pp. 332; muslin. Price, \$1.50. New York: J. B. Ford & Co.

Full of human nature. Mr. Eggleston's best effort. We have here the experiences of those grand old pioneers of the Methodist Church, who hammered, roared, and sang Satan out of, and the Gospel into, the hearts of wicked, hardened men. Love-making—true to the life—gambling, horse-racing, camp-meetings, conventions, school teaching, and life on the borders, in nearly all their phases, are pictured in a most graphic manner in this tale of the "Circuit Rider."

MODEL FIRST READER. Sentence, Method. By J. Russell Webb, author of "Normal Readers," "Analytical First, Second, and Third Readers," and "Word Method," etc. One vol., 12mo, pp. 112; boards. Price, 45 cents. Chicago: Geo. Sherwood & Co.

The idea of the author is to teach the child how to express his thought, and we think he has adopted the right plan by putting the picture and words expressing the object beside each other. Mr. Webb, though a father, and possibly a grandfather, has not forgotten that he was once a boy. He realizes and anticipates the wants of boys—and of girls also—in this, his new school reader.

MODEL DIALOGUES: A New and Choice Collection of Original Dialogues, Tableaux, etc., for School Exhibitions, Literary Societies, Lyceums, Anniversaries, and Commencements, the Holidays, Church, Sunday-school, and Sociable Gatherings, Temperance Meetings, and Home Amusement. Compiled by William M. Clark, editor *Schoolday Magazine*. One vol., 12mo; pp. 375; muslin. Price, \$1.50. Philadelphia: J. W. Daughaday & Co. The publishers say:

There have been brought together in "Model Dialogues" the best contributions of more than thirty prominent American writers, in which almost every shade of sentiment and emotion has been represented. Although the pieces are all the careful production of experienced and cultured writers, they are generally pictures of the cheerful and humorous side of life, rather than the melancholy or sentimental, while in a number of instances a bit of ridicule has been so cleverly put, that it will enable certain classes of folks to see themselves as others see them more effectually than by any other means.

Let the children and young folks have these "Dialogues." They will prove a real relish amid their studies or their work.

ARGUMENT before the Committee on Public Buildings and Grounds of the House of Representatives, Friday, Feb. 12th, 1874, upon the Memorial of the Board of Trustees of the Girls' Reform School, asking for the construction of suitable buildings for this institution, the District Legislature having provided the necessary legislation, and made an appropriation for the purchase of land. By Mrs. Sarah J. Spencer, President of Board of Trustees, Washington, D. C. The ladies pray the authorities "to make such an appropriation as will render it possible to open a National Girl's Reform School in the District of Columbia, wherein outcasts and criminals may be secured from temptation and vice, and educated and trained to become industrious, skillful, useful members of the community." The Board of Trustees comprises: Sara J. Spencer, President; Susan A. Edson, M.D., Vice-President; Emma A. Wood, Secretary; Peter G. Campbell, Treasurer; John F. Cook, Auditor; A. G. Riddle, Solicitor; Thomas B. Florence; A. W. Scharit; Caroline B. Winslow, M.D.; Mrs. Le Droict Langdon. Let the good work go on.

THE HORTICULTURIST continues its usefulness, and is a very pleasant monthly, adapted to the farmer, gardener, florist, and to the dweller in hamlet, village, or city, or even to the occupant of a single room. The April number has a beautiful picture of Fairmount Park, Philadelphia, and of the bridge across the Schuylkill. The *Horticulturist* was established in 1846 by A. J. Downing. Send \$2 to H. T. Williams, No. 76 Beekman Street, New York, and you will have the pleasure of welcoming its pleasant face monthly for a year.

CONTRIBUTIONS WANTED.—We received the following circular from an enterprising town in old Virginia. The officers, young men, appeal for aid; they say:

We take the liberty of inclosing you the circular of the "Library Association," which was organized on the 4th of March, 1874. Feeling assured that you will gladly contribute to an enterprise of so much importance, we kindly solicit your aid, by making us such donations or sending such papers, periodicals, books, maps, or other articles, as will enhance the interests of an association of the highest moral tone, aiming at progress in the Arts, Sciences, and Literature. What is needed most to elevate the mind of our youth is not that they should know all that has been thought or written in regard to education, not that they should become encyclopedias, but that the great ideas from which all discoveries result and which sum up all sciences, may be more fully comprehended and felt.

With every indication that our town will grow rapidly in the future, and become one of the largest manufacturing inland towns in the State, we feel that this institution is destined to exert an important influence upon society, and to awaken new and more intense interest in reading and literary culture in our midst, and also advertise the productions and gifts of our worthy contributors. Respectfully.

Now, what are we to do in such cases? We have many applications, and should be very glad to place our "good books for all" in the hands of these impecunious young Virginians, feeling assured they would do them much good. But we are not rich, and can not afford to give something for nothing. Where is the rich man, or woman, who would be glad to have us distribute our publications among the benighted at *their* expense? We are ready to accept the trust, and carry on the missionary work.

THE
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AND
LIFE ILLUSTRATED.

A REPOSITORY OF
Science, Literature, and General Intelligence,

DEVOTED TO

ETHNOLOGY, PHYSIOLOGY, PHRENOLOGY, PHYSIOGNOMY, SOCIOLOGY, PSYCHOLOGY, EDUCATION,
MECHANISM, AGRICULTURE, NATURAL HISTORY, AND TO ALL THOSE PROGRESSIVE
MEASURES WHICH ARE CALCULATED TO REFORM, ELEVATE, AND IMPROVE
MANKIND, SPIRITUALLY, INTELLECTUALLY, AND SOCIALLY.

Embellished with Numerous Portraits from Life, and other Engravings.

VOL. LIX. OLD SERIES.—VOL. X. NEW SERIES.

July to December, 1874.

S. R. WELLS, EDITOR.

NEW YORK:
SAMUEL R. WELLS, PUBLISHER, 389 BROADWAY
1874.



“ Quiconque a une trop haute idée de la force et de la justesse de ses raisonnemens pour se croire obligé de les soumettre a une expérience mille et mille fois répétée, ne perfectionnera jamais la physiologie du cerveau.”—GALL.

“ I regard Phrenology as the only system of mental philosophy which can be said to indicate, with anything like clearness and precision, man's mixed moral and intellectual nature, and as the only guide short of revelation for educating him in harmony with his faculties, as a being of power ; with his wants, as a creature of necessity ; and with his duties, as an agent responsible to his Maker and amenable to the laws declared by the all-wise Providence.”—

JOHN BELL, M.D.

“ To Phrenology may be justly conceded the grand merit of having forced the inductive method of inquiry into mental philosophy, and thus laid the permanent foundations of a true mental science.”—*Encyclopedia Britannica*, 8th Edition.



THE
PHRENOLOGICAL JOURNAL
AND
LIFE ILLUSTRATED.

VOL. LIX.—No. 1.]

July, 1874.

[WHOLE No. 427.]



FERDINAND V. HAYDEN,

OF THE UNITED STATES GEOLOGICAL SURVEY.

THIS gentleman has a very fine-grained and sensitive organization, and lives more in a day than some men do in a week. He has inherited a tendency to overexertion; his mind is so active and his feelings so in-

tense that he is liable to work too hard for the strength and endurance of his body. The open air and sunshine being the life of the world, are particularly necessary for him, in order to keep himself as much toned up and

strengthened as possible to sustain the wear and exertion which his active brain is constantly imposing upon him. He inherits his mother's intuitive readiness of thought; is sharp, quick, clear, and critical; picks up knowledge as if it were on the wing, and is able to recall that which he has seen, heard, and experienced. He has a natural taste for literature. His language is large enough to make him an excellent talker, and his powers of description are excellent. Yet he is rather remarkable for power of intensifying and condensing that which he is to say. He has mechanical judgment; appreciates combinations and the uses of machinery as adapted not only to natural science, but to literary methods. We rarely find a combination of literary talent and the capacity for natural science in harmony with each other more strongly marked than Dr. Hayden has them; hence he is a close, sharp observer, and an excellent delineator of what he understands.

He reads character at a glance; appreciates strangers, and has wonderful power to influence men who are difficult to manage. He is honest, persevering, and ambitious to be known and respected. He has also a great deal of self-reliance, but is not haughty.

He is frank, open, hearty, enterprising, and watchful relative to dangers, but not afraid to meet them. His mind is so quick that he is able to adapt himself to new and dangerous situations almost instantly. His social nature qualifies him to make friends, to win affection and hold it. He is fond of society, is gallant and loving toward woman, and particularly fond of children and pets. He is spirited and courageous without being quarrelsome or severe in his spirit. He needs more Secretiveness to give him policy. He is frank almost to a fault. People who have a right to his acquaintance will know him like a book. He has few concealments, and if he were to go into a political or a strictly

business pursuit, he would find occasion for more personal service and policy.

DR. HAYDEN was born in the town of Westfield, Mass., of Puritan descent, on the 7th of September, 1829. His parents emigrated to Ohio, on the Western Reserve, while he was yet quite young. There he lived on the farm till the age of sixteen, obtaining such education as the common schools of the neighborhood offered. He subsequently fitted himself for the college at Oberlin, Ohio, where he was graduated in 1850; then studied medicine, and obtained his license to practice at the Albany Medical College in the year 1853.

In the spring of 1853 he visited the so-called "Bad Lands" on White River, Dakota, in the interest of Prof. James Hall, of New York, and also explored one of the remarkable ancient cemeteries containing the remains of extinct animals, returning with a very large and valuable collection of fossils. In the spring of 1854 he again ascended the Missouri River, under the auspices of the American Fur Company, and spent two years in exploring the Upper Missouri without any other means than those he earned or secured in various ways as he went along, being dependent even for subsistence entirely on such friends as he made in the country.

From this expedition he returned in 1856 with a great collection of valuable geological specimens, etc. A portion of this collection was deposited with the Academy of Science at St. Louis, and a part with the Academy of Natural Science, Philadelphia.

The information thus obtained attracted the attention of the officers of the Smithsonian Institution, and secured for Dr. Hayden the position of Geologist on the staff of Lieut. G. R. Warren, Topographical Engineer, who was then making a reconnoissance of the North-west. In this relation Dr. Hayden continued until 1861, when he entered the army as a medical officer, having been accepted by the board of examiners and confirmed by the Senate as assistant surgeon and surgeon of volunteers on the same day, with the rank of major. He exercised the functions of chief medical officer of Beaufort, South Carolina, during 1863, and of assistant medical inspector in the Department

of Washington for seven months in 1864, and was subsequently sent to Winchester, Va. During Grant's successful campaign of that year Dr. Hayden had much to do with organizing field hospitals, and served as chief medical officer for over a year. At the close of the war he was breveted lieutenant-colonel for meritorious services.

In the summer of 1865 he resigned, and made an expedition to the Upper Missouri in behalf of the Academy of Natural Sciences, and in 1866 returned with a valuable collection of vertebrate fossils for the museum.

The United States geological survey of the Territories was started in the spring of 1867 with an appropriation by Congress of \$15,000, continued in 1868 with \$5,000, in 1869 with \$10,000, in 1870 with \$25,000, in 1871 \$40,000, in 1872 \$75,000, with \$10,000 for engraving, and in 1873 \$75,000, and \$20,000 for engraving. This enterprise has thus grown up from a small beginning through

the personal efforts of the geologist in charge. The survey, up to this time, has published six annual reports, and a final report of Nebraska, in octavo, three vols. 4to, with numerous illustrations, about a dozen maps, etc. The amount published since 1869 may be appreciated when we state that it will aggregate about 3,000 pages octavo, with numerous plates and illustrations; about 800 pages quarto, with 70 plates of objects.

Dr. Hayden has written about forty scientific papers, of greater or less extent, outside of his special relations to the survey, many of them being volumes of considerable size. He is a member of the National Academy of Sciences, and also of nearly all scientific societies in America, honorary member of the Anthropological Institute of Great Britain, of the Geographical and Statistical Society of Mexico, corresponding member of the Royal Academy of Sciences at Leige, Belgium, and of the Academy of Sciences at Cherbourg, France, and is still a growing man.

VICE AND CRIME: THEIR CAUSES AND CURE—No. 3.

BY ROBERT WALTER, M.D.

DEFINITIONS.

THE first and important step in a scientific investigation of any subject is a proper definition of that subject. This is too often overlooked by thinkers and writers, and because it is overlooked do men frequently arrive at absurd conclusions, and propound ridiculous doctrines. Of late years much has been written on the subject of food, but no writer condescends to define the term, and for this reason we have learned authors ranking such deadly poisons as alcohol in the list of tissue-forming materials. Volumes have been written on the subject of disease, yet few authors ever attempt to tell us what disease is. They are content to believe that it is a *something* that ought to be vanquished; they speak of it as a *thing* flying in the air, hiding in one's clothes, being transported in ships, pouncing upon us unawares, and the like. An intelligent definition of the term would expose the absurdity of such ideas, and make us heartily ashamed because of their shallowness.

True, the dictionary is supposed to settle

all these questions of definition; but dictionaries give only the popular meaning. When popular notions are wrong, dictionaries simply echo the error. It is not their business to correct it, but only to record language as it is used by its best speakers and writers. For instance, according to Webster food is "whatever is, or may be eaten for nourishment." This is certainly a broad definition. If any one takes it into his head to eat arsenic, as many do, that is food. Alcohol or strichnine or prussic acid may be food if eaten for that purpose. The truth is, language has been formed to give expression to past ideas, and dictionaries are simply the repositories of that language and those ideas, and hence their definitions are just as correct as prevailing ideas are, and no more so. Dictionaries preserve ideas as they are, but it is the scientists' business to expose them as they should be, and exhibit the truth as it is.

What is vice? and what is crime? The terms are nearly synonymous. They represent infractions of law, the former express-

ing a lesser degree of sin than the latter. Vice has reference chiefly to personal habits, or actions which begin and end in the individual; while crime expresses evil conduct in relation to others. Drunkenness, gluttony, profane swearing, and the like, are vices; while arson, burglary, murder, etc., are crimes. The distinction, however, is finical. Vices are really crimes. It is impossible that an action can begin and end in one's self. Everything has relations to everything else, and all actions affect all objects. The results of our transgressions are transferred from parent to child throughout all generations, so that personal vices are crimes against posterity, if not directly against society.

Vice and crime may be comprised under the general head of sin, and sin is a transgression of law. But of what law? The definition of this word sin is exceedingly limited in the popular idea. It is supposed to represent only transgression of such divine laws as have been formulated, and not at all to have reference to the laws of one's being as these exist in the nature of things. There is much punctiliousness among men regarding the former, with great looseness and indefiniteness regarding the latter. And for this reason sin abounds much more than grace does. If men could but learn that all laws are divine laws, and, therefore, that all are equally sacred, there would, we believe, be less sin, and, consequently, less suffering than now exists.

The degree of criminality connected with the transgression of law is to be measured by the character of that law. There is no crime committed in transgressing bad or unholy enactments, because these are not and can not be laws; but every law of nature is a law of God, and is as sacred as the source from which it proceeds. And yet men in all ages have striven to belittle some laws in comparison with others. From the time when the lawyer stood up tempting Christ, by asking him "which is the great commandment of the law," to the present day, the same spirit has prevailed. There are some laws that are not sacred, say they; there are some that may be transgressed with impunity; there are decrees that are of no consequence. They never made a greater mistake, as the innumerable woes that afflict society amply prove. "To

love God," Jesus said, "is the great commandment; and the second is like unto it, Thou shalt love thy neighbor as thyself. On these two hang all the law and the prophets." Why are these two singled out as the great commandments? Simply because in them every law of the universe is comprehended.

God is honored and loved through love bestowed upon our neighbor, and love to our neighbor is shown by doing him good. Now, it is for the good of the creature that all the laws of the Creator have been established, and if these laws are allowed to work unobstructedly, they are entirely adequate to the ends sought; but transgression obviates their legitimate effects, and brings evil where good should have come. It is for this reason that transgression is sinful. No matter in what department of nature that transgression takes place, whether in physical, mental, or moral; whether in the laws of health or the laws of trade; whether in the laws of nature or the laws of the decalogue, evil must result therefrom just as surely as good follows obedience—evil not only upon one's self, but upon mankind in general; so that a transgression of any law is equivalent to a violation of those great commands, Thou shalt love God, and love thy neighbor as thyself.

That man who slays an animal and allows its rotting carcass to infect the atmosphere which he and I must breathe, as my neighbor has done with his horse, commits a crime against God and man. That city which allows its streets to become filthy, its pest-holes to accumulate, or decaying substances to infect the air, transgresses both the laws of nature and the laws of the decalogue. The tobacco-smoker, who is poisoning his own tissues with that rank and disgusting weed, shall sup sorrow in his own person not only, but shall behold the results of his transgressions in the sufferings of his offspring. He may poison the atmosphere in sublime indifference to the rights of others, but Abel's blood will cry from the ground against the crime, and the mark of the murderer shall fall upon the brow of Cain.

That man who riots in gluttonous excesses, and other indulgences, and then expects to cheat nature out of the legitimate results by the swallowing of worse evils under the plea of *contraria contrariis curantur*, or *similia*

similibus curantur, will wake up when too late to find that all his artful dodges were unavailing, as thousands are daily doing. Two wrongs never make one right. Evil added to evil never produces good. God never yet ordained penalties for the transgression of laws, and then prescribed remedies to do away with those penalties. To do so would be to destroy every principle of divine government. If laws might be violated with impunity—if causes might be brought into operation without producing their legitimate effects, then every incentive to right doing would be removed, and progress would be a word without a meaning. Men may continue to cheat themselves with the delusion; but marvel not, my brethren, “God is not mocked, whatsoever a man soweth, that he shall reap.”

Nor have men any right to bring into operation the laws of nature in abnormal ways. The man who manufactures alcohol, and puts it to his neighbor's mouth, shall not escape the penalty. He who deals in health-destroying viands must bear the penalties of his sins; who poisons food because he makes greater profit upon it, or increases its sale by rendering it more tempting by the use of poisons, shall not escape. Every law of nature speaks loudly against pursuits that do not add to the general welfare. That man alone is engaged in legitimate occupation who is adding to the sum-total of human weal; that employment is alone noble and honorable which, while it enriches the worker, increases human happiness. He who is simply gaining to himself by plundering from others, no matter though it be in accordance with legalized usages, must bear the brand of the plunderer, even though he be railway king, merchant prince, or corner-grocery keeper. Legislating for “back-pay,” for railway monopolies, for fat contracts, producing “corners” in the gold, stock, or grain markets, not even excepting the charging of exorbitant and discriminating rates of transportation, or enormous profits on merchandise are fitly characterized as “stealing” or “robbery.”

And the sinner must turn from his sins if he would live. No amount of beneficence to churches or colleges or benevolent enterprises will compound the crimes of legalized but

unlawful money-getting. “Master, what shall I do to inherit eternal life?” “Go, sell all thou hast and give to the poor (who have become poor because you are rich), and come and follow me.” The young man went away sorrowful, because he had great possessions—possessions undoubtedly that had come to him by a clear conception of the advantages that legal enactments conferred on the shrewd speculator. Christ's command to go sell all he had and give to the poor was not gammon, as some would have us believe; but it was said because it was *meant*, and because the young man could gain eternal life in no other way.

Productive industry is the only lawful employment for any man. But by productive industry I do not mean tilling the soil simply. There are thousands of things that add to the comfort and happiness of man besides bread to eat. His mind must be fed as well as his body; hence the thinker and teacher of truth is well employed. His social nature must be supplied with its wants; therefore, kind words, sympathy, fair-dealing, are always valuable products; the inventor, the mechanic, the merchant, the railway manager, are all producers of good when their talents are properly employed.

All occupations, employments, businesses that add to human weal are lawful, and none others. And the only happy man is he who lives in accordance with God and nature's laws. Who would sail blissfully to divine love must go with the current; who would reach the goal of happiness must travel the road that leads thereto; who would receive the benefits of God's laws must comprehend and obey those laws. The laws of nature are the forces of nature. If we comprehend those forces and put ourselves into proper relation to them, they will waft us onward and upward to the land of glories whose beauties are not to be described; but if we put ourselves into opposition they will roll over us in unrelenting severity, as does the locomotive in its track, or strike us as does the mighty lightning, and crush us to oblivion.

What, then, is vice or crime from a scientific stand-point? It is the transgression of any *law* (not enactment), physical or moral, civil or religious. It is the bringing into

operation the laws of nature and of nature's God in such a way as to produce evil results. In other words, it is the doing of anything by any man by which himself, society, or

posterity is in any degree injured. From this point we may proceed intelligently to examine the causes and cure of vice and crime.

Department of Religion and Psychology.

Know,

Without or star, or angel, for their guide,

Who worships God shall find him.—*Young's Night Thoughts.*

The soul, the mother of deep fears, of high hopes infinite;

Of glorious dreams, mysterious tears, of sleepless inner sight.—*Mrs. Hemans.*

DEAN HOWSON, OF CHESTER, ENGLAND.

DR. HOWSON (John Saul Howson) is the eldest son of the Rev. John Howson, M.A., who, for some forty years, was connected with the ancient grammar school of Giggleswick, England. This north-country school has always borne a high reputation; it was here that Archdeacon Paley was educated. The district is Craven, the south-west of Yorkshire, "a country of green and open pastures, with gray limestone cliffs, hazel-woods, and clear streams." There is one member of Dr. Howson's family of whom some mention should be made. This was his youngest brother, George Howson, who had been his pupil at Liverpool, and was associated with him in the same institution as one of the masters.

The subject of our memoir was a member of Trinity College, Cambridge. In 1837 he was graduated as a double first. There are few if any men of that year who have obtained a more distinguished place in their own walk in life. He did not obtain the doubtful advantage of a fellowship, but soon entered upon the active work of life by becoming second master of the Liverpool Collegiate Institution. He subsequently, in 1849, became the principal of that great school. After spending more than sixteen years in that office, he became Vicar of the large parish of Wisbeach, in Cambridgeshire; but in 1867 returned to his old diocese, as Dean of the Cathedral at Chester.

His first literary work, the "Life and Epistles of St. Paul," at once made a superior literary reputation for him, which has steadily increased.

It is not too much to say that some of the most sustained and eloquent writing of our day is to be found in Dr. Howson's pages; and there is no doubt that they lent an immense stimulus to Biblical study in this country. We should especially mention his contributions to that mixed work, of large compass but unequal execution, "Smith's Dictionary of the Bible." He has also directed much attention to the great subject of Missions. He has also published an edition, with introduction and notes, of an "Apology for the Greek."

In 1862 he was the Hulsean Lecturer at Cambridge, taking for his subject "The Character of St. Paul." He has also published a work on the "Metaphors of St. Paul," and more recently a book on "The Companions of St. Paul."

In one volume he discusses the subject of "Habits." We give an extract or two:

"Having spoken sufficiently of the readiness, which is one great mark of habit, and one secret of its power, I will turn to another almost more formidable, which we may call the *unconsciousness* of habit. What I mean is this: when a man is quite accustomed to do a thing, he does it without thinking of it. We see this exemplified in what we call a man's peculiarities. What attracts the notice of every one else, entirely escapes his own. We see it again in the dexterity which people acquire in the motions of the body, and in works of skill. It seems that we can set no limit to the cunning adroitness which can be attained to by practice, and exercised without thinking, and without remembering

the steps by which it was learned. To watch the little children's fingers in one of our great manufactories, as they busy themselves with the threads, and nimbly adapt themselves to the motions of the wheels, is almost like a miracle to those who have not acquired the habit. We have a proverb which says that custom is a second nature. And it is true of our moral as well as our physical nature.

on the subject of "Deaconesses in the Church of England." This he subsequently expanded into a small volume, enriched with appendices and notes. At the outset of the paper he defines "approximately what we mean," and says that "by Deaconesses we understand something contrasted with desultory lady visitors on the one hand, and strictly conventual sisterhoods on the other. We



It is true there also, that in proportion as we acquire the habit of this or that course of conduct, we forget how we learned it, we follow it unconsciously. The more perfectly we have acquired the habit, the more unconsciously do we follow it. This is a law which God has been pleased to impress upon our nature."

About ten years ago Dr. Howson published an important article in the *Quarterly Review*

desire to see women devoting themselves to the nursing of the sick, to the systematic care of the young, to the rescue of the degraded, to the details of parochial work, as the business of their lives; and yet we desire to see this done without ensnaring vows, without any breach of domestic ties, and without even the affectation of what is foreign to the English people and the English Church." Orders of a similar character ex-

ist in this country, in connection with non-Episcopal as well as Episcopal churches.

We must not omit to mention one of the most useful and successful of the Dean's labors. Soon after his appointment, in 1867, the nave of the cathedral was fitted up for evening services, and preachers were invited from various parts of the diocese, the Dean himself frequently occupying the pulpit.

A kinder face than the Dean's is rarely seen; its sympathy and good nature, notwithstanding the indifferent quality of the engraving, beam out. The eyes have a scru-

tinizing, thoughtful expression, but are not stern, with all their owner's vested authority. The mouth is mobile and graceful, not at all one of those squarely cut features so common among the clergy. One can not think of Dr. Howson as an ascetic, while he may impute to him loveliness of disposition, a warm and generous heart, and an energetic activity. His temperament is of the mental type in a high degree, but the large chin indicates an excellent supply of vital stamina. As phrenologists, we confess ourselves much pleased with this paper presentment of the Dean of Chester's face.

HOW TO DISCOURAGE YOUR MINISTER.

TWELVE PLAIN RULES.

1. **H**EAR him "now and then." Drop in a little late. Do not sing; do not find the text in your Bibles. If you take a little sleep during the sermon, so much the better.

2. Notice carefully any slip he makes while you are awake; point out the dull portions to your children and friends; it will come round to him.

3. Censure his efforts at usefulness; deplore his want of common sense; let him know that you won't help him because A. B. does, because you were not first consulted, or because you did not start the plan yourself.

4. Let him know the follies and sins of his hearers. Show him how much he overrates them, and tell him their adverse criticisms on himself.

5. Tell him, when he calls, what a stranger he is; how his predecessors used to drop in for an hour's chat, and how much you liked them.

6. Never attend the prayer-meeting; frequent no special service. Why should *you* be righteous overmuch?

7. Occasionally get up a little gaiety for the young folks. This will be found very effectual about the communion season. "There is a time to dance," "you know."

8. Give him no intimation when you are ill; of course he should know; and your offended dignity, when he comes to see you, will render his visit pleasant. On no account intimate your recovery.

9. Require him to swell the pomp of every important occasion, unless, indeed, there are prudential reasons for passing him over.

10. If he is always in his own pulpit, clamor

for strangers; if he has public duties, and sometimes goes abroad, complain that he is never at home.

11. Keep down his income. Easy means are a sore temptation, and fullness of bread is bad for every one—but the laity.

12. As he will find it hard to be always at home to receive callers, and always running among the people, and always well prepared for pulpit and platform, you will be sure to have just cause for complaint, one way or the other. Tell it to every one, and then lament that there is so general dissatisfaction with him.

Patient continuance in courses like these, modified according to circumstances, has been known not only to discourage, but to ruin the usefulness and break the spirit of ministers, to send them off to other charges, and sometimes to their graves.

Those who desire to avoid such results should avoid the practice of such things as are here referred to. Let us "Help one another."
—*Christian Advocate*.

[Now we will suggest a few simple rules by which to encourage your minister:

1st. Procure for him the best current magazines; not only those of the church to which he belongs, but those of other churches; also scientific and literary journals. Send him the best secular newspapers, so that he may be kept thoroughly posted as to what is going on in the world. Do not omit the *PHRENOLOGICAL JOURNAL* and the *Science of Health*.

A fresh book now and then will be thankfully received—not as a loan, but as a gift. He is not only your preacher, he is your *teacher*,

or should be, and would be if put in the way of it.

Praise him for whatever you see or hear that merits it. If his sermons feed and do you good, tell him so. He enjoys a word of approval as much as one's husband or wife.

Send him a basket of fruit, a bouquet of flowers, or a hamper of other good things; they will not come amiss in a minister's family.

Lend him your horse, or take him out to

ride occasionally, and observe how his mouth will turn up at the corners. Invite his wife also. Will they ever forget such attentions?

Most clergymen are human, and enjoy the good things of life as well as those who produce them; and, as a rule, they are not in the way of money-making, and can not afford many luxuries. With proper attentions on the part of the laity, a pretty good preacher may be made out of one not gifted with superhuman abilities. Try it.]

DUTY AND MANHOOD.

If thou hast thrown a glorious thought,
Upon life's common ways,
Should other men the gain have caught,
Fret not to lose the praise.

Great thinker, often thou shalt find,
While folly plunders fame,
To thy rich store the crowd is blind,
Nor knows thy very name.

What matters that, if thou uncoil
The soul that God has given,
Nor in the world's mean eye to toil,
But in the sight of heaven?

If thou art true, yet in thee lurks
For fame a human sigh;

To nature go, and see how works
That handmaid of the sky.

Her own deep bounty she forgets
Is full of germs and seeds,
Nor glorifies herself, nor sets
Her flowers above her weeds.

She hides, the modest leaves between,
And loves untrodden roads;
Her richest treasures are not seen
By any eye but God's.

Accept the lesson. Look not for
Reward; from out thee chase
All selfish ends, and ask no more
Than to fulfill thy place.

THE IDEAL OF CHRIST'S PERSON.

THE Christ of painters is blue-eyed and golden-haired, and such a one never existed save in their imaginations. A blonde in the race of Syrian Jews is unknown. He was a *brun* (since we have no word in our language which describes a man with dark hair and eyes, and olive complexion) of that race. There are pious people who have recourse to a miracle to make him a blonde, with whom it is useless to argue. Generally, the stoutest defenders of his divinity believe that in taking on himself man's nature, he subjected himself to the laws which govern it, and that he thus inherited the characteristics of the race from which he sprung. Leonardo, Guido, Raphael, and other masters, *created* their Christ, regardless of historical requirements, and invested him with an ideal character which he never possessed, according to their ideas of the beautiful in art. This model, once imposed, has since been perpetuated by all painters, because they think blue eyes more spiritual than

dark, and golden hair more God-like than black.

They have an idea, too, that the Jewish type of face was ignoble, which may have had some foundation, from the degradation to which the race was forced for so many centuries by persecuting Christians, and they thus had their prejudices against investing the Saviour with the traits of the people whom they despised. But the Jew of Syria, in the day of Jesus, was, before his persecution and consequent debasement, perhaps the equal of the man of any other race, in point of natural advantages. There are Syrian Jews now, in isolated habitations in Palestine, who are remarkable for their handsome traits.—*Home Guardian*.

[We should like to know the facts in this case. It has been said that there were Jews with light complexions in the country where Christ was born. Can not Rabbi Isaacs, of the *Jewish Messenger*, give us reliable information on these points? We have seen some

thirty or more likenesses—or pictures—said to have some resemblance to Christ, painted by as many different artists, and the most striking peculiarity among them is this—that he is made to resemble somewhat the countrymen to whom the artist belonged. A German makes Christ look like a German; an

Italian, like an Italian; and a French artist makes him resemble a Frenchman; while an Englishman gives him the rotund form of a well-fed Englishman. In Africa he is painted black. We presume a Mongolian painter would give him the complexion of a Chinaman; while Japanese artists, like others, unconsciously put *themselves* into their pictures.]

THE PRIMEVAL RACE DOUBLE-SEXED.

BY ALEXANDER WILDER, M.D.

THE proposition that the human race at one time were so formed that man and woman constituted but a single person, may, at first thought, impress the mind as most extraordinary. It will be supposed that the analogies of the natural world tend to demonstrate the idea as absurd. The myriads and millions upon the earth of human beings, and their cotemporaries of the animal and vegetable creation, it may be thought, sustain the negative view. Perhaps it is seemingly too absurd even to consider with patience. We trust not; the world has spent much of its youth in canvassing and supporting opinions far less philosophical, far less rational, far less plausible, and far more whimsical.

That a large part of the vegetable creation exhibit the phenomenon of bisexuality is patent to every one. In the Linnean classification, all plants are so enumerated, except the monœcious and diœcious, and perhaps the *mélange* which the great naturalist set apart as cryptogamous. These exceptions, it is palpable, by no means include the superior families. "The pumpkin, squash, and cucumber, the maize-plant and some of our forest trees are monœcious, having staminate flowers apart from the pistillate blossoms; and others, like the hemp, Lombardy poplar, and ailanthus, have also duplicated bodies, one being male and the other female. But the great majority, the grasses and cereals, fruit trees, and garden-flowers, all have the blossoms complete; the germs, with their styles, are beside the stamens as gallantly as need be. As the evidence of science indicates that plants came into existence first, we can easily perceive that this mode of formation, self-perpetuation, was the fresh first thought of Omniscience.

In the animal creation, the same idea still retains a place. We have our sciences of *heterogenesis* and *parthenogenesis*, showing that the field is yet open. In insect life, the moth generates a worm, and the worm becomes a moth, as in the Mysteries the great secret was expressed—*Taurus draconem genuit, et Taurum draco*. The polyps, or coral-producing family, which, according to Agassiz, has spent many hundreds of thousands of years, during the present geological period, in building out the peninsula of Florida from the main land, has never distracted itself about family and connubial questions. Each individual is a part physically of the entire household, or rather community, and they produce their offspring from themselves like the buds and ramifications of a tree. They have no family jars, like those of husband and wife, parents and children, nor trouble with the traditional mother-in-law or sister-in-law. They all grow up in the same way, budding side by side, or dividing, and, while so multiplying, remain united together, so as to form a larger mass. Such examples of household unity would have delighted the ancient psalmist if he had known much about polypods; coral friendships are, indeed, "like precious ointment"—very adhesive. Nor is this mode of life all monotonous. Each species of polyp has its own peculiar mode of budding, branching, and ramifying, giving it as distinct an appearance as exists upon different trees. The number of these different species is very great; and they all have not only peculiar features and habits, but require different positions in the sea. There are those which are only found in shallow waters; others again in water two fathoms deep; others are never found in waters which are less than

five or six fathoms deep; and others in waters at least ten fathoms deep. The mere fact of the water being more or less clear is enough either to foster their growth or cause their destruction. Glorious illustrations of the blessings of peace! No wars, no long viking expeditions, no civil dissensions, no peril but from the elements. Not only families, but different races and species co-operate, each complementing and supplementing the work of the others. Though they make very slow progress, only about an inch in fourteen years, and taking six thousand years to build a single reef of sixty feet high, these peaceful animals have thus steadily persisted, each builder and race taking its own turn, relieving each other when "played out," till the structure is complete. Thus they have contributed the territory for an entire State of the American Union, and at the same time have illustrated the modern idea of co-operation.

Bees are somewhat in the same line. The queens and workers are pretty independent. They carry on the hive very much as the coral animals do their building; and the queen, producing eggs in immense numbers, asks little odds of any other. The aphids, or plant-lice, keep house like Amazons, and virgin parents perpetuate the race for ten successive generations.

The earlier traditions of the human race indicate a period when bisexuality was an essential characteristic. Plato, in the "Banquet," has preserved to us the discourse of Aristophanes on the subject. "Our nature of old was not the same as it is now. It was *androgynous*; the form and name partaking of and being common to both the male and the female. The entire form of every individual was rounded, having the back and sides as in a circle, and all the parts doubled. They walked as now, upright, whithersoever they pleased. Their bodies thus were round, and the manner of their running was circular. They were terrible in force and strength, and had prodigious ambition. Hence Zeus (Jove) divided each of them into two, making them weaker; Apollo, under his direction, closed up the skin." With the old Persians, Meshia and Meshiane were but a single individual. They also taught that man was the product of the Tree of Life, growing in androgynous

pairs, till they were separated at a subsequent modification of the human form. The inhabitants of Madagascar say that the first man was created from the earth and placed in a garden, free from the ills, wants, and appetites of mundane life, and that he was strictly forbidden to eat or drink. The Great Enemy, disguised as a shining angel, pretended to bring a message from heaven, setting aside the prohibition. He then ate; a slight swelling appeared on his leg, and enlarged to a tumor, which, finally bursting at the end of six months, there emerged a beautiful girl, who became at maturity the mother of the race.

The accounts given in the book of Genesis appear to imply that man was created double-sexed. In the fifth chapter it reads: "This is the book of the generations (Hebrew, *toleduth*) of Adam: in the day that God created man, in the likeness of God made he him, male and female (*zachar va nakobeh*) created he them, and blessed them, and called their name Adam in the day when they were created." This passage is the copy and echo of Genesis i. 27: "God created (*bara*, brought forth) man in his image, the image of God created he him, male and female created he them."

The rabbis, many of them, agree with this idea of the legitimate meaning of these texts. Eugibinus, among Christian authors, and the rabbis Samuel, Menasseh ben-Israel, and Maimonides, especially, gave the weight of their judgment in favor of this interpretation. "Adam," it was said, "had two faces and one person, and from the beginning he was both male and female—male on one side and female on the other; but afterward the parts were separated." The 139th psalm, by David, abounding with references to creation and embryonic life, was cited in evidence. The rabbi Jeremiah ben-Eleazer, on the authority of the fifth verse, "*Thou hast fashioned me behind and before*," argued that the primeval form of mankind was androgynous.

Indeed, the phrase, "*in the image of God*," sustains rather than controverts this sentiment. Waiving all argument from the fact that the plural form *aleim*, and the pronoun *us*, are often used for God, with verbs in the singular number, nevertheless the double sex, as an essential attribute of the Deity, is a

very early idea. It is evident that the "male and female" condition, or male-female, is implied as constituting the "image" and "likeness" of God. The ancients often depicted their divinities in this form. "Zeus is a male, Zeus is an immortal maid," is asserted in the Orphic hymn, which was chanted in the Mysteries. Metis, devoured by Jupiter, Pallas-Athené emerging from his head, and the younger Bacchus inclosed in his thigh prior to birth, were but symbolical expressions to denote this female life. "The Mighty Power became half male, half female," is the doctrine of the Hindoo Puranas. The Egyptians blended the goddess Neith with Amon in the creation; as *Hakmoh*, or Wisdom is united with the Demiurge, Jehovah, in the eighth chapter of the Proverbs of Solomon. In the Hermetic books intelligence is declared to be "God possessing the double fecundity of the two sexes."

Many of the Hindoo images, in conformity with the same idea, are half male and half female, and have four arms. Some of the statues of Jupiter have female breasts, and representations of Venus-Aphrodité give her a beard, to signify the same thing. Even in the first chapter of the Apocalypse the personage appearing to John was "girt about the paps," or *mastoi*, not the *mazoi* or male breasts. The Deity being thus constituted, his image and likeness, very logically, should be with attributes of both the man and the woman, "neither male nor female, but both one."

The name *Adam*, or man, itself implies this double form of existence. It is identical with *Athamas*, or *Thomas* (Tamil, *Tam*), which is rendered by the Greek *didumos*, a twin. If, therefore, the first woman was formed subsequently to the first man, she must, as a logical necessity, be "taken out of man." Accordingly we read: "And the Lord God caused a deep sleep to fall upon Adam, and he slept; and He took one of his *sides* and closed up the flesh instead thereof; and the *side* which the Lord God had taken from man, made He a woman." The Hebrew word here used is *tzala*, which bears the translation which we have given. It is easy to trace this legend in Berosus, who says that *Thalatth* (the *Omoroca*, or Lady of Urka), was the beginning of the creation.

She was also Telita, the queen of the moon, as the first woman, *Aiséh*, was Isis.

The corollary of all this is, that the Adam or twin-man was male on one side and female on the other; and that one-half of him was removed to constitute Eve; but that the complete man consists of the sexes in one.

The two memorable twin-births of Genesis, that of Cain and Abel, and of Esau and Jacob, shadow the same idea. The name *Hebel* is the same as Eve, and his characteristics seem to be feminine. "Unto thee shall be his desire," said the Lord to Cain; "and thou shalt rule over him." The same language had been uttered to Eve: "Thy desire shall be to thy husband, and he shall rule over thee." So, too, the name Jacob signifies a female—*nakobeh* being one form of the word, and *yakob* another, from the same root. It was Isaac's purpose to place him under the rule of Esau; but when the father was circumvented it became necessary to give Jacob the masculine name of Israel.

Godfrey Higgins suggests, in his *Anacalypsis*, that the Siamese twins represented the original androgynous idea. There are similar instances on record of twins with a ligamentary union, and a single umbilicus. The analogy of Esau and Jacob seems to have held good in their case; Chang was masculine and dominating, while Eng submitted and obeyed. (Whether their union was as vital as has been asserted, we question. The liver appears to have constituted it; but although fluids passed from one body to the other, sensation did not. Chang had been dead for hours before Eng perceived any disturbing agency; and then it seems to have been only, or principally, alarm. If the ligament had been divided, and some stimulant employed to distract the attention and reduce the sensibility of Eng for several days, it appears to us that he might have now been alive. Of course we believe that a bold but sagacious operator might have separated them safely many years ago. But this discussion is foreign to our present subject.)

Both the New Testament and the English common law seem to accept this doctrine of the pristine bisexual unity of the human race. Jesus, in reply to the caviling question of the Sadducees concerning the future existence of those who die, declared, "In the

resurrection they neither marry nor are given in marriage, but are as the angels or sons of God." This can not mean that they are unsexed, or monks and nuns, as in a Roman or Thibetan convent. To be like God and his angels, they must be "children of the resurrection." The resurrection-life, or *anastasis*, must be the complete reversing of the fall or *apostasis*. If man began life in form as well as spirit like God, the *aleim*, in the restitution of all things, he will resume that life as it was at the first. 1 Cor. xi. 11.

Indeed, the English law, "the perfection of reason," perhaps unwittingly leads to the same conclusion. "A husband and his wife constitute but one person, and that person is the husband." It is but this alternative, or that of a common twin-life. "As it was in the beginning so it ever shall be."

When Science becomes the complement of divine revelation, it will disappear like a star in the effulgence of the sun.

DECORATION DAY.

LIST to the sound of the bells! the bells!
Sad is the note that their music tells.
Eyes are now dropping the burning tear,
Sorrow and mourning and gloom appear.
The patriots are calling, the fallen and true:
"All that we had we have given for you;
Gather your fairest and gather your best,
To garland the graves where the soldiers rest."
To the land of the fairies the message had flown,
And the queen of the flowers ascended her throne,
While her subjects came flocking in violet and green,

To inquire the reason the court should convene.
So when all were assembled, in beauteous array,
"We have gathered," the monarch responded,
"to-day, [rest.]"

To garland the graves where our brave soldiers
To give of our fairest, to give of our best,
Then a murmur arose like the hum of the bees,
Or the sigh of the wind in the boughs of the trees,
As each one of the flowers the glory did crave,
To be formed in a wreath for a soldier's grave.

"I must go," said the rose, "for I'm queen of the flowers,

And a wreath is imperfect not plucked from my bowers." [cure,

Then the white rose and red tried a place to se-
For one was so gorgeous, the other so pure!

Next, the lilies entreated for room in the wreath,
And their fair bells drooped lower in innocent grief;

While the dahlias plead colors of every hue,
Of white, red, and yellow, of crimson and blue.

The verbenas stood straight, with such various display,

That the rest of the flowers shrank back in dismay.
Out from under the green leaves, with soft eyes of blue,

Plead in eloquent silence the violets true.

The forget-me-nots came with an array so great,
They surrounded the queen on the throne of her state; [and youth,

"We have watched the sad partings of friendship
And they took us for pledges of love and of truth,
For our blossoms reposed on the heart of the maid,
And our flowers on the breast of the soldier were laid.

In the battle he bore us 'mid war's fearful storm,
And the bullet-marks oft did our petals deform.
We are not the fairest, we are not the best,
Yet the soldier would like us to grace his last rest."
But softer the murmur, and sweeter the sound,
As the sweet-scented wild flowers gathered around,
"We can boast of no beauty, and our petals are pale,

For we love the dark shade of the deep woody vale,
But, for this, we have opened our earliest bloom,
And for this we have hoarded our sweetest perfume;

For while yet on the ground lay the beautiful snow,
Our leaves were unfolding in greenness below.

Fairest Queen, send us not to our home in the shade—

Let our fragrance arise where the soldier is laid;
Yes, take of our fairest, and take of our best,
To sweeten the sod where our brave soldiers rest."

Then a chorus of voices pervaded the air,
As the loud notes ascended from everywhere,
Of the daisy, and cowslip, and clover, and all
Of the flowers that garland the wayside and wall:
"Though we may not be wreathed with the blossoms so bright,

Yet we'll spring on his grave like the stars of the night,

And when others much fairer are faded and gone,
All our leaves will be green, and we'll still blossom on.

He has seen us at home at the feet of his bride;
He has plucked our first flowers for the child at his side. [Maine,

From the swamps of the South to the forests of
From Atlantic's rough shore to the great Western plain,

We have cooled his hot wounds on the green turfy sod,

And our flowers have been dyed with our country's best blood.

We have pillowed his head as he breathed his last sigh,

With our fragrance his soul has ascended on high.
We have whispered of home, of his children and wife,

And he gave them to heaven as he yielded his life.
No garland we'll make of our fairest and best,
But where'er is a grave shall our flowers deck his rest."

LODOLA.

Physiognomy, or Signs of Character.

Of the soul, the body form doth take,
For soul is form, and doth the body make —Spenser.

EYES: THEIR DIFFERENCES AND SIGNIFICATIONS.

SIGHT, as a means of communication between the world without and the world within us, is undoubtedly entitled to rank the highest in importance of all the external senses. As if in conformity with this idea, the organs of vision are placed above all the rest of the five senses, with the sole exception of the sense of feeling, which, as it is distributed all over the body, can be assigned no specific location. More constantly employed than any or all of the other senses, the faculty of sight well attests its claim to superiority by the vastly more extended scope of its activity and usefulness. Whatever knowledge of external things is conveyed to us through the media of touch and taste, is obtained only by physical contact with the object concerning whose properties we wish

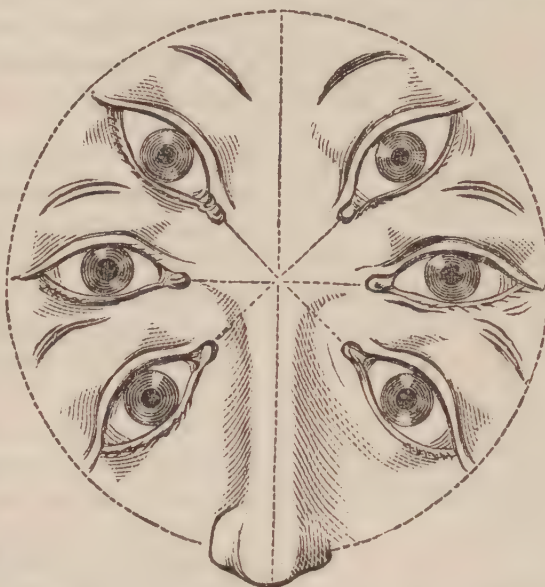


Fig. 1—RELATIVE POSITIONS OF EYES.

a distance, beyond the reach of such contact. A single inch of separation would suffice to shut out the whole world of matter from our sphere of consciousness, were we dependent upon these senses alone. Next in importance with respect to the range of its activity, is the sense of smell, which, though it operates at a much greater distance with respect to the sources of the impressions it re-

ceives, yet reaches very quickly the boundaries of its sphere of activity, and may often depend for the information it obtains, entirely upon the caprices of the wind. What a small world would we live in, were we in possession of only these three faculties! The sense of hearing is likewise almost as much restricted in the scope of its activity as that of smell, and like it largely dependent, for



Fig. 2—HORIZONTAL EYES.

to be informed; and, consequently, these avenues of information must forever remain closed to impressions from any and every object that is removed, by ever so slight

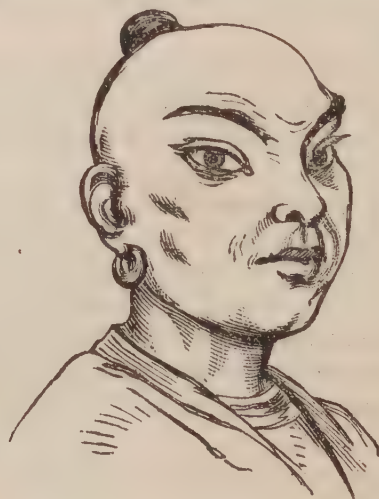


Fig. 3—UPWARD OBLIQUE EYES.

its ability to operate at a distance, upon the condition of the atmosphere.

But when we come to the crowning sense of all, what limits can we set to the boundless

field of its activity? What avenue of research is closed to its penetrating gaze? Not only is it cognizant of every object that can affect the other senses, but myriads of objects are made known to our intelligence through this avenue alone. Not only does its unaided



Fig. 4—DOWNWARD OBLIQUE EYES.

capacity take in objects of every magnitude and at distances ranging from an inch and less, to scores, and even hundreds of miles; but by the proper appliances the field of its activity may be enlarged indefinitely. The most exquisite touch could not possibly discern the presence, much less learn aught of the characteristics of an object a few inches removed, or the ear catch the faintest echo of the melodies with which the far distant air is freighted; but the feeblest eye is capable of discerning the twinkling light of the stars so many myriads of miles away. Moreover, while no discovery has been, or is likely to be made, that shall enlarge the bounds of the activity of touch or taste, and while mechanical contrivances have added but little comparatively to the scope of the ear, what endless worlds have been opened up and brought within the reach of the eye by means of the telescope and the microscope! How well we can see distant worlds of whose harmonies we can never catch the faintest echo! Does not the faculty of sight, then, deserve to sit enthroned above all the other senses, because the most useful of all?

How admirably, also, does it compensate for the deficiencies of any or all of the rest! He who has lost every sense but this need not be shut out from association with the living world around him. Though the ear be deaf to the tones of the human voice, he

can yet hold intercourse with other minds by the language of signs or through the medium of the printed page; while the delicate tints of the flowers will make amends for the loss of their perfume; the harmonies of color take the place of those other harmonies



Fig. 5—DOWNWARD OBLIQUE EYES.

which are not for him, and all the varied beauties of form and outline which adorn the world of vision are his to enjoy.

THE EYE IS AN ORGAN OF LANGUAGE.

It is not only as a means of extensive communication between the outer world and the mind that the eye claims our attention, but also as a responsive agent of the mind itself, sharing, as it does, with but one other organ the ability to convey as well as to receive impressions. This responsive property of the eye, this ability to "answer back" in language



Fig. 6—UNEQUAL EYES.

often far more eloquent than words, is shared by no other feature but the mouth, which it far surpasses in its ability to interpret rightly the emotions of the mind. The ear takes in the divinest harmonies, and makes no sign, the nose inhales the most delicious perfumes,

but expresses no intelligible opinion; the tongue and palate regale themselves with the choicest sweets, but in themselves, without the aid of the voice, are dumb and unresponsive; but through the "windows of the soul" the man himself looks forth in quick acknowledgment of every joy received—every emotion stirred.

Moreover, the language of the eye needs no interpreter. It is a language universally



Fig. 7—LARGE EYE.



Fig. 8—SMALL EYE.

understood. The language of the lips, or spoken language, may, and does, change with every few hundred miles we travel in any direction; but that of the eye never changes: it is the same in every clime—under every sky; and is easily comprehended by high and low, learned and unlearned, the practiced man of the world and the inexperienced child, the civilized and the savage—nay, even brutes understand and obey it. The power of the eye to express the various passions which agitate the mind within is boundless and unequalled by any form of audible speech. As a vehicle for transmitting thought or intelligence, it is also available. The questioning eye, the "look that answers 'yes,'" the stern, forbidding gaze that says so plainly, "no," have no need of the lips to act as their

the eloquent looks, the beaming glances that accompany them. The soldier, urged on by a brave officer, catches the light of his eye, and is kindled to deeds of valor. All comprehend and acknowledge the power that speaks in the flashing eye, inspiring terror in the guilty and fresh courage in the virtuous; in the commanding eye compelling awe and prompt, even unwilling obedience; in the "look that speaks volumes" when tongue and lips fail in their task of expressing the thoughts and emotions that throng too fast for utterance. As a natural organ of language, the eye may express all the nobler emotions of the mind; so, also, may it be made the servant of baser uses. The look of coarse insolence, the brutal leer expressive of a brutal mind, the insinuating glance that hints at more than the lips dare utter, are some of the varied forms of the language so much in vogue among the fraternity of such as the man "who teacheth with his fingers," "who winketh with his eyelids."

Then who shall estimate the magic power of the eye to inspire and awaken the tenderest, holiest emotions? When words have failed to move the obdurate heart, it has yielded at once to the tender, appealing look of an eye lustrous with deep feeling. And how much more potent, often, the silent, reproving glance than any words that could be uttered! Before the calm, steady gaze of the clear, truthful eye, effrontery stands abashed, falsehood and deceit, stripped of all their subterfuges, shrink away in confusion;



Fig. 9—PROMINENT—LANGUAGE.

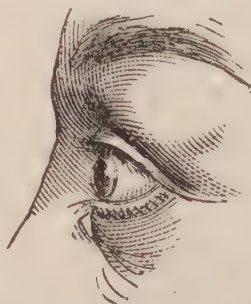


Fig. 10—PROTUBERANT—OBSERVATION.



Fig. 11—DEEP-SET—ANALYSIS.

interpreter. The faithful dog reads his master's wishes in his eyes, and hastes to obey the command ere it is uttered.

MAGNETISM OF THE EYE.

The magnetic power of the eye to influence can never be overrated. The orator, swaying thousands by his impassioned utterances, lends tenfold energy to his burning words by

angry passions are calmed and deprived of all their fierceness, while savage beasts, their fitting representatives, cower and flee before its irresistible influence.

EMOTIONS BEST INTERPRETED BY THE EYE.

In many emotions the eye not only requires no assistance from spoken language, but immeasurably surpasses it, being the only organ

capable of adequately expressing them when all language fails but its own. The staring eyeballs of speechless terror, the rolling eyeballs of frenzy, the fixed gaze of despair, the flaming eye of anger, the pleading gaze of silent entreaty, more eloquent than words, the rapt, extatic gaze of earnest adoration, the soft, tender glances of love, the sweet,



Fig. 12. UPRAISED—PRAYERFUL. Fig. 13. DOWNCAST—PENITENCE.

earnest gaze of sympathy, the tearful gaze of "heavy-lidded grief," the fiendish glare of hatred, the dancing eye of delight, the sparkling eye of animated interest, the laughing eye of mirth or mirthful appreciation of all familiar examples, easily recognized, and incapable of being misunderstood.

LIFE INDICATED IN THE EYE.

As the eye is the principal organ of expression in the countenance, and is constantly animated by the living soul within, mirroring forth its ceaseless activities, so the absence of life, whether physical, mental, or moral, is more quickly perceived in this than in any other feature. How quickly is lack of interest or absent-mindedness betrayed by the eye, though the ear may be to all appearance most studiously inclined to the subject under discussion, and the attitude would

the former of the absence of feeling, or the want of mental and emotional life.

Here are two countenances, both wan and colorless, both worn and robbed of all life-like expression by the ravages of illness; but in one, the conscious soul looking forth

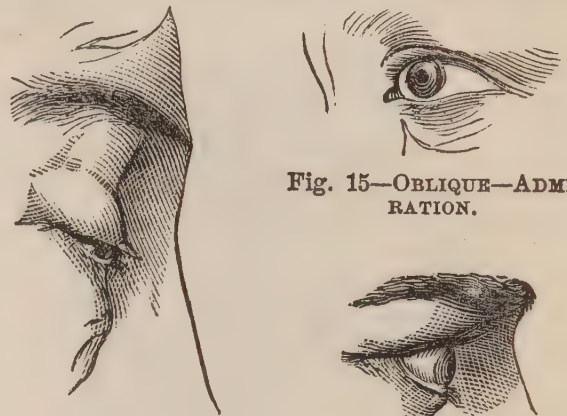


Fig. 14. DROOPING—MELANCHOLY. Fig. 15. OBLIQUE—ADMIRATION.

through the eyes, whither all the expression belonging to the countenance seems to have taken refuge, proclaims that it still retains possession of its earthly tenement; while in the other, the fixed, glassy stare that alone meets our questioning gaze is sufficient to assure us that all life has departed. Were the eyes of these two closed, it would be difficult by sight alone to determine which was the sleeper for time and which for eternity; but once open, a single glance would decide the question. Wherefore we close the eyes of our dead, lest their icy stare should too rudely dispel the fond illusion we would hold a little longer, that our beloved is but sleeping.

THE EYE A BETRAYER.

The eye is not only a truthful interpreter of inward thought and emotion, but it is



Fig. 17—STRONG.

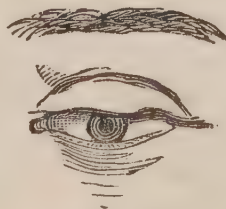


Fig. 18—WEAK.



Fig. 19—FRANK.

seem to denote attention. The cold, repellant stare of the fashionable "cut-direct" owes all its power to wound to the intentional repression of every feeling except that of supreme indifference so plainly evinced. The blank, expressionless gaze of imbecility tells as plainly of the absence of thought as

also an involuntary one. The lips may dissemble with ease, but the eye rarely, if ever, deceives. So well aware of this are the majority of mankind, that those whose purposes and designs are evil, and who wish to conceal their real feelings and intentions, veil their eyes as much as possible, lest their expression

should betray them. Hence, an eye habitually half-closed, or one that persistently avoids meeting the gaze of others, is everywhere regarded with distrust and aversion. The tongue may deceive; but the candid eye must speak the truth. Flickering eyelids, which break up and distort the actual ex-



Fig. 20—MALIGNANT.

pression, so that it is difficult to determine it, are especially unfortunate.

PHYSICAL CHARACTERISTICS.

We will now take a brief review of some of the physical peculiarities of the organ of vision, which are almost as numerous and varied as are the sentiments it is used to express. And first we will consider the subject of situation, or relative position to a horizontal line drawn just above the root of the nose, or, if you please, to the perpendicular line of the nose itself. As may be seen in the illustration at the head of this article, eyes are divided with reference to position into—

Straight or Horizontal,
Descending Oblique,
Ascending Oblique.

The first type is very common. The second is seen in its perfection only among Oriental nations, and is familiarly illustrated in the domestic cat, in which it is a very marked feature. Investigation may determine the specific points of mental resemblance between the Chinaman and the cat, of which he is said to be so fond. The third, as it is not unfrequently met with among representative men who exercise great influence in their day and generation, may serve, in some degree, to indicate the special characteristic to which they are indebted for the power they wield. It imparts to the coun-

tenance an expression of exalted enthusiasm, such as we would expect in reformers and leading minds of all ages.

We come next to consider

SIZE,

which is generally conceded, all other things

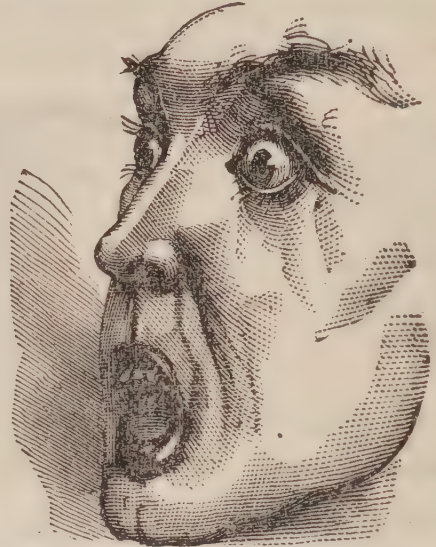


Fig. 21—TIMIDITY AND TERROR.

being equal, to be a measure of capacity. A large eye has a wider range of vision, as it unquestionably has of expression, than a small one. A large eye will take in more at a glance, though perhaps with less specific attention to detail, than a small one. People with large eyes are usually of a dreamy or speculative disposition, and this expression is often seen in eyes of this sort. Generally speaking, large eyes see things in general, and small eyes things in particular. The one sees many things as a whole, often seeing through and beyond them; the other sees



Fig. 22—MIRTH.

Fig. 23—RAGE.

fewer things, but looks keenly into them, and is cognizant of every detail—when it sees at all; for some eyes look at everything and yet see nothing. But more of this anon.

PROMINENCE.

Fullness of the eye, causing a bulging of the lower eyelid, is the well-known sign of Language. Persons with this sign large have not

only a speaking eye, but a speaking tongue; whereof the world around them does not long remain in ignorance. A general projection or fullness of the eye above and below, bringing the eyeball with the eyebrow forward on a line with the face, denotes the quality of physical perception, or the capacity to see quickly whatever appears upon the surface of things. A person with such an eye, on entering a room for the first time, would note in an instant the shape, size, arrangement, and general appearance of every article of furniture in it, the pattern of the carpet, the color of

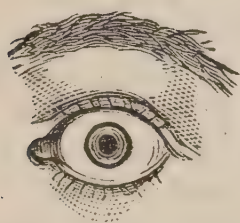


Fig. 24—HARD—STONY.



Fig. 25—PITIFUL.

the walls, curtains, etc. In looking at a picture such a person would very quickly perceive every detail of color, the number, grouping, attitude, and costume of the figures composing it, and every little accessory, but nothing further.

On being introduced to a stranger, such a one would take in with equal rapidity and facility the contour and relative size of every feature, the color of eyes and hair, and the cut, style, finish, quality, and arrangement of every article of clothing worn on this or any subsequent occasion. Such people, with all their close powers of vision, are eminently superficial in all their seeing; never looking deeper than the surface of things, they see *over* everything, and *into* nothing. Abstract subjects, and all that requires an interior vision to see and appreciate it, have no attractions for them. They are very aptly depicted in the character of the man of whom it is said that—

“A cowslip by the river’s brim—
A yellow cowslip ’twas to him,
And it was nothing more.”

Opposed to this, in every respect, is the apparently deep-set eye, looking out from beneath boldly projecting eyebrows, which give it this appearance, and which indicates the faculty of mental, rational, or analytical perception. Such an eye sees deeply into things; beneath and beyond effects he sees

causes, and perceives motives in results. Such a one would observe more readily whether the style of a garment were in accordance with the character of the wearer than with the prevailing mode; and would perceive the thought that sought expression in the pictured group or landscape.

POSTURE OR ATTITUDE,

whether casual or habitual, has its readily recognized significance. The pervading tone of the character is readily perceived in the habitual posture of the eye. Thus, the uplifted eye denotes prayerfulness, the eyes being always raised in earnest prayer; the downcast eye, humility, whose glances ever modestly seek the earth, as if unworthy loftier fields of vision. Rapture throws the eyes obliquely upward, while the downward oblique attitude is indicative of wonder. The last two attitudes, from the nature of things, are seldom if ever habitual. Certainly, few people are so circumstanced that their eyes are forever rolled up in ecstasy.

We come now to consider the character of

EXPRESSION,

that inseparable attribute of the eye, which may be briefly classified as—

Good,	Strong,
Bad,	Feeble.

Although the passions, emotions, and sentiments that find expression in the eye are endless in number, and constantly changing, yet they all speak through an organ that, in its general or most habitual expression, belongs to one of these four divisions. The



Fig. 26—OLD AGE.



Fig. 27—YOUTH.

first comprises those clear, frank, open, lustrous eyes, whether wide-awake and sparkling, or thoughtful and dreamy, which belong to a pure, earnest soul in a well-organized body. Evil passions may, at times, kindle

in them, momentarily, the light of darker fires; but their habitual expression denotes the activity of gentler, nobler emotions; and we meet far oftener, in such eyes as these, the soft beams of pure and elevated feeling, which we instinctively look for, than the sharp gleam of anger or the dark looks of sullenness and discontent.

The next sort are those *dark* eyes — not dark from color, but from dark thoughts and feelings that look through them. With lids always more inclined to close than to open

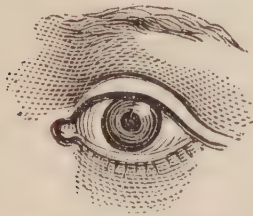


Fig. 28—EDUCATED.



Fig. 29—IGNORANT.

frankly — generally about half-shut — sometimes only permitting a gleam of the eye to be visible between their edges; their uncertain, ambiguous glances baffle our attempts to read their language, and fill us with aversion. "Treacherous eyes," we call them — "evil eyes," and from time immemorial their baleful influence has been alike dreaded and detested. Such eyes indicate lack of integrity, and often depraved passions — sometimes of the worst sort. They are the sign of an ill-regulated mind, often in a body as greatly demoralized.

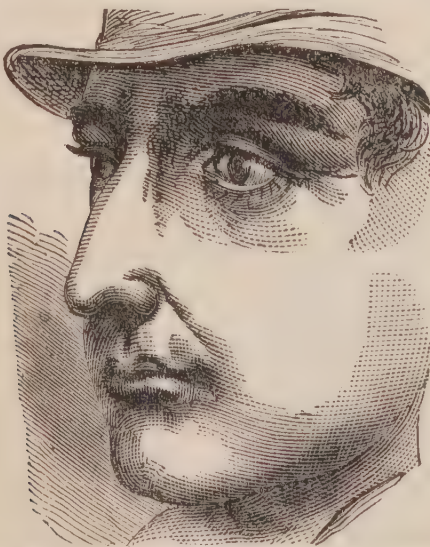


Fig. 30—TEMPERATE—HEALTHFULNESS.

Then there are eyes whose prevailing expression, from first to last, is that of power. They indicate great and strong capacities for good or evil. Whatever feeling animates them is expressed strongly. They love and hate with equal intensity. They are mighty

to threaten or command. Eyes which possess this characteristic to the fullest degree are *born* to command. There is a magnetism about them, a controlling force which none can resist. People with such eyes have always strongly marked characters. In whatever they concern themselves, they are always very much in earnest.

There are mild, gentle eyes whose expression, while it does not impress us with any idea of power, is yet far from being at all weak. There are, however, eyes whose every glance is characterized by feebleness, not of vision, but of expression. They lack decision and distinctness of character. Contrary emotions are expressed so feebly that it is hard to distinguish one from the other; so that it often appears as if these eyes possessed no distinctive expression. Such eyes indicate feebleness of intellect, great apathy, or an ill-organized physique. They are often dubious in color, comparatively lusterless, often dim and watery, sometimes resembling those of a fish. Where the feelings do operate, they act sluggishly; the mind is generally as dull as the eye. Such a one would be weak and vacillating in his opinions and purposes, though, as likely as not, pig-headed about trifles, easily confused in his ideas, and utterly inadequate to the accomplishment of anything requiring vigor of treatment or clearness of mental vision. Such persons



Fig. 31—DISSIPATED—SOTTISH.

have, moreover, but little self-control or steadiness of principle; and though incapable of a noble resentment, are easily offended. In short, they never seem to outgrow their childhood.

Most eyes are more or less *transparent* in

their character, some much more so than others. To look into some eyes is like gazing into the depths of clear, still lakes, whose placid surface reflects naught but beautiful images, and into whose transparent depths the sunbeams penetrating reveal only sparkling sands and snowy shells and pebbles, like pure thoughts, in every variety of beautiful forms. Other eyes are like deep, dark pools, under overhanging rocks, whose gloomy depths, where heaven's light seldom penetrates, are suggestive of treacherous whirlpools and lurking monsters watching for their prey. Others, again, are like the sea, ever changing, sometimes troubled, mysterious, and often incomprehensible, wherein we let down the line not knowing what we shall bring to the surface. Others, still, are like shallow streams, whose transparency only reveals their emptiness. Pretty eyes they are, some of them, that sparkle and dance very gaily when the sun shines upon them, but with no depth or wealth of beauty in themselves. But there are eyes which shine through all their transparent depths with a soft light and brilliancy from within, like the fire that glows in the opal's heart.

There are some eyes, however, which seem to lack this quality of transparency in a remarkable degree. Without depth or brilliancy, utterly unresponsive, they look like colored marbles more than anything else. Such eyes should be included in the fourth class enumerated above.

AGE,

unless accompanied by disease, or a breaking down of the mental and physical powers, while it works its will upon the surroundings of the eye, affects that organ itself less than any other feature. The vigorous, piercing, expressive eyes of the young man, full of fire and enthusiasm, not unfrequently look out from beneath eyebrows white with the snows of many winters. Where either mind or body has been misused, however, the eyes are the first to suffer, and in old age tell too plainly the story of an ill-spent life. Mental or physical exhaustion of any kind tells heavily upon the eyes, especially at the approach of old age. Generally speaking, the eye has a tendency to sink deeper within the head with the gathering years; partly because mental activity causes the brows gradually to

project beyond it, partly, perhaps, because of the shrinking of some of its ligaments, and the gradual absorption of its fluids, which takes place in extreme old age. The expression, of course, alters very much in the transition from the cradle to hoary hairs; becoming, according to the character of the life that is led, better and better, or worse and worse.

EDUCATION.

A volume might be written on the effects of education of various kinds on the eye. The powers of the eye for seeing its character and expression are susceptible of great modification by means of special training. The range of vision may be widened or contracted in accordance with the methods by which the eye is habitually exercised. Shooting, firing at a mark, archery, and similar employments that exercise the eye upon objects at a distance, enlarge the scope and increase the strength of vision, and conspire to impart clearness and steadiness of gaze, and to develop and improve the powers of observation. On the other hand, continual reading of fine print, or contracting the habit of holding all objects to be inspected close to the eye, though it increases, sometimes, its microscopic powers, shortens the range of vision, and is a prolific cause of near-sightedness. For this reason, residents in towns and cities, whose view is always more or less limited and restricted by brick walls and the multiplicity of objects near at hand, are more liable to near-sightedness than those who live where distance lends enchantment to the view and strength to the sight, and where the eye has a wider, more unobstructed field in which to roam in search of objects of interest. Hunters, backwoodsmen, and Indians, much of whose life is spent in the open prairie, where the eye takes in an unbroken sweep of scores of miles, and who are trained, by the circumstances of their daily life, to see and recognize objects readily at a distance, are noted for their long, clear, keen sight. To those troubled with near-sightedness, firing at a mark, and similar exercises would serve gradually to counteract this tendency; also, for residents in cities, the long vistas of some of our streets, or the blue expanse above our heads—when it is blue—would afford opportunities for exercising the eye upon objects at

a distance. A good plan would be to ascend, as often as practicable, some eminence commanding a wide view of the city and its surroundings—the East River Bridge and its towers will be a good place, when it is finished; only we would not advise our readers to wait for its completion before making the experiment—and practice identifying distant objects without the aid of a glass. If care be taken not to fatigue the eye, by straining their muscles in the effort to see more distinctly, the practice will be found to be very beneficial. Board fences with their multifarious posters in all sizes and shades of lettering, afford frequent opportunities for exercising the eye in reading at a distance.

Mental and physical education of every sort produces its own unmistakable effect upon the eye. The bright, beaming eye of intelligence or intellectual appreciation presents a striking contrast to the dull, expressionless eye of stupidity and ignorance. Note the bright, animated glances of a group of educated men, conversing upon a topic in which they take that intelligent interest that arises from well-informed minds, and contrast them with the blank, bewildered expression in the eye of one to whom the whole subject is a mystery above his comprehension. Or, on the other hand, evil thoughts and associations, or physical abuses of any sort, record themselves very quickly in the eyes.

EYELIDS

do their part in modifying or heightening expression, and have, besides, a language of their own. The penitential, sorrowful, or bashful droop of the eyelid are too expressive and well known to need much comment. Habitually drooping eyelids denote these qualities—one or more of them—in constant activity.

Eyelids which are corrugated, or drawn up by the *orbicularis* muscle, forming wrinkles running outward and downward from the corner of the eye, as if to meet those which turn upward from the corners of the mouth, are the well-known sign of mirthfulness, being very strongly marked in the act of laughing. Weeping reddens the eyelids, and when at all protracted causes the lids to become swollen, and gives them the downward droop of sorrow. Transient bursts of tears, quickly and easily shed, and as quickly

and easily forgotten, like April showers, seem only to impart an added brightness to the eye; but the protracted weeping of deep-seated sorrow robs the eye of its light and animation.

Wrinkles running upward and outward from the eye, are thought to indicate probity and truthfulness. The eyes of an habitual drunkard are always heavy, and unless lighted with the unnatural fires of frenzy, are dull and blank, often suffused and dim, and show a disposition to squint and see double. The eyebrow is forcibly raised in the effort to counteract the involuntary drooping of the upper eyelid—which, as if aware of the disgraceful story the eyes were telling, strives to hide their shame from the world—and prevent the eye from closing; the whole combining to form an expression both painful and ludicrous.

EYEBROWS,

though comparatively void of expression in themselves—that is, when at rest—are most efficient aids to expression. Among southern nations, and all people of a mercurial temperament, they are much employed as an organ of language. Should the reader be unaware of the extent to which they may be made to serve this purpose, let him observe a group of Frenchmen engaged in animated conversation, and he will have no further need of information on this subject. Surprise, astonishment, interrogation, contempt, distaste or aversion, appreciation, consternation, doubt, and a thousand wordless emotions are capable of most eloquent interpretation by the eyebrows with a very little aid from the other features. No one who has seen them contract into a frown or expand into the genial breadth of benevolent complacency; who has seen them raised in astonishment and lowered in suspicion, can doubt their mobility, or the extent to which they are capable of being employed as interpreters of the mind's activities.

Character is expressed in the size, shape, and thickness of the eyebrow when in a state of rest or inactivity. Though varying considerably in these characteristics in different individuals, they may be generally classified as

Thick,	Smooth,
Thin,	Bushy,

which, again, may be fine or coarse according

to the general texture of the individual to whom they belong. Thick or heavy eyebrows generally accompany luxuriant hair; and where they are fine in texture and well-shaped, are by no means an unhandsome feature. Thin, but well-defined eyebrows are indicative of refinement and delicacy of perception and feeling; but scanty, and almost



Fig. 32—BUSHY EYEBROWS.

colorless eyebrows denote some physical or mental deficiency—sometimes both. This sort of eyebrow usually accompanies an expressionless eye and a weak, vacillating character. Smooth eyebrows would seem to indicate a corresponding evenness of temperament, while bushy eyebrows always impress us with a sense of originality, or at least, strong individuality of character in the wearer. Such eyebrows are often a marked feature in eccentric individuals.

In contour, brows are arched or straight, regular or irregular. Arched eyebrows are of two general classes, single and double arched. In the first class both brows unite to form a single arch; in the second, which is much more common, each brow forms a complete arch of itself. Each of these various modifications has its own distinctive meaning, which is given in detail and at considerable length in the "New Physiognomy," to which we would refer all who wish to pursue this interesting subject further.



Fig. 33—LONG AND NARROW. Fig. 34—WIDE AND ROUND.

But, with all their variations, eyebrows always conform in a marked degree to the character of the eye which they overlook. Irregular, darkly overhanging brows of suspicion never accompany the frank, open eye of ingenuousness and simplicity, or delicately pencilled brows the dull, expressionless eyes

of mental incapacity and coarseness; or weak, scanty brows accompany the strong, fearless, penetrating eye of power; or the boldly-arched, clear-cut, uplifted eyebrow of truth, the habitually half-veiled eye of suspicion or malice.

SHAPE.

Eyes vary, also, very perceptibly in shape; from the long, narrow opening, scarce more than a slit in the countenance, comparatively speaking, through all gradations of the oval form, up to the almost perfectly round eye. Emotions of various sorts serve, of course, to modify, temporarily, the shape of the eye. Astonishment, for instance, and kindred feelings, by opening the eyelids very wide, increase, for the instant, the apparent size and roundness of the eye, giving rise to the expressions, "Round-eyed wonder," and "Eyes as big as saucers," whereby we endeavor to describe the effect produced upon this organ by the communication of any astonishing intelligence.

Eyes which, in their ordinary aspect, are much wider horizontally than vertically, with



Fig. 35—CLOSED—DEAD.

"level fronting eyelids" seldom uplifted, usually seem to possess much power of penetration and steadiness of gaze *laterally* in all directions, but with little inclination to look higher, and do not impress us with any idea of spirituality in the mind that looks through them. But wide, round eyes, where they are large and luminous, whose upper lid rounds up naturally into an almost perfect arch, forming with the inverted arch of the lower—like a reproduction of itself in a clear stream—an almost perfect circle, for of course no eye is exactly round, are the true indexes of spirituality, and are marked features in the countenances of such men as Swedenborg and in many of our best poets. Seeing so well in all directions, they sometimes appear to look especially in no particular one, which aids in imparting to them the dreamy, abstracted expression so inseparably associated with eyes of this kind.

CONCLUSION.

And now, having reached and indicated the highest type of eye—that in which the immortal spirit reveals itself with all its yearning aspirations toward its proper home, which is *not* this world of matter—we will pause. We have briefly indicated the *natural* eye, that perceives only natural things or objects as they appear to the external senses in this lower world of matter—which serves very well as a foundation or basis for the rest, but in which none should wish to linger forever—the *intellectual* eye, which perceives thoughts within expressions and causes within effects, and the *spiritual* eye, which sees deeper and farther, because higher, than the others, and which, beyond and within effects and causes, is ever looking for the ends for which and from which they exist. Reader, to which of these three classes do *your own eyes* belong? Which do you most admire? Which would you choose to have, with the realm of sight that accompanies it? To a great extent, it is in your power to decide which you *will* have. The faculties of mental and spiritual sight lie dormant in every one, awaiting only use to develop into active powers. Do you ask, “How is this to be accomplished?” The analogy that exists between natural and spiritual things will answer this query. Do we not, in the realm of purely natural sight, always perceive readiest and best that which we look for? Then look carefully and diligently for objects upon which to exercise your mental vision. Be not satisfied with having seen the outside of anything; look *within* it for something deeper than appears upon the surface. Examine thoroughly, and again and again; be not afraid of exhausting your subject. The Creator has put into every work of His hands more than enough to reward the most extended observation. Get others more advanced than you to help you to discover these things; avail yourself of their superior powers of perception; learn to look, as it were, through their eyes—not by closing your own and blindly depending upon them to do your seeing for you, but intelligently, as you would use a glass to aid your powers of vision, but not to take their place.

Among the most valuable aids in strength-

ening and perfecting mental vision will be found the study and application of Phrenology and its kindred sciences, as enabling the careful student to perceive the *meaning* that lies beneath the outward variations of form—the thought, the emotion that speaks in every change of feature. Read poetry of the best kind often and attentively, that the things of sense and appearance may be fraught with an inner wealth of significance which you will gradually learn to *see* and appreciate. Above all things, search for objects fitted to delight the spiritual eye; dig for them as for hid treasure, and when your search is rewarded you will not need our assurance that your labor has not been for naught. A careful study of your own nature with its highest possibilities, in the light of revelation, will be your best aid in this effort. Be in the constant endeavor to elevate your thoughts above the things of time and sense, and listen carefully to the promptings of those higher spiritual intuitions which, lingering in all minds, yet are oftener drowned, suppressed, and lost sight of in the roar and bustle of the gross outer world than heard and obeyed.

But if you make no effort to obtain this power of mental and moral vision, you will in time lose even the possibility of possessing it, and become to all higher, nobler, imperishable things hopelessly *blind*. And doubt not that your sad infirmity will be only too evident to all who possess themselves the power of sight; for the eyes which you have neglected to use in the realms wherein they were intended to be exercised will reveal their loss in every glance—a loss to you irreparable, and which you can ill afford to sustain. Therefore we say, in parting, With all your seeing, forget not the noblest way of all—forget not to *look up*.

ALTON CHESWICKE.

IMMORTALITY.—Of immortality, the soul, when it is well employed, is incurious. It is so well that it is sure it will be well. It asks no questions of the Supreme Power. 'Tis a higher thing to confide that if it is best we shall live,—'tis higher to have this conviction than to have the lease of indefinite centuries, and millenniums, and æons. Higher than the question of

our duration is the question of our deserving. Immortality will come to such as are fit for it, and he who would be a great soul in the future must be a great soul now. It is a doctrine too

great to rest on any legend, that is, on any man's experience but our own. It must be proved from our own activity and designs, which imply an interminable future for their play.—*Emerson.*

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall !
Thou art the nurse of virtue.

MUST WOMEN BE IDLE?

ANY occupation useless and unremunerative should be classed as idleness. Man's instinct is forceful energy ; woman's, passive endurance. He is the granite basis, massive and firm, against which internal fires seethe and press in vain fury ; she, the overlying strata, the source and home of vines and blossoms. Watch the school playground before conventionalism has coiled its many silken cable threads around the young lives of its occupants. Boys, since the memory of the "oldest inhabitant," have followed, year after year, a fixed order of games corresponding to the seasons—tops, marbles, base-ball, and snow-balls. Indeed, it is more than probable that little Noah and Abraham pitched and tossed balls of skins, and the youthful Moses made marbles of sun-dried clay to amuse Egyptian princes. Turn to the girls' department. What is their game? No one can tell. It is merry but new, and so is the one they played five minutes ago. Their genius is always on the alert to remodel old games or invent new ones. Let the two sexes unite in the open air in some light, merry sport. With all propriety the boys on the prescribed bases stand aghast as their light-footed sisters flit around them, first on one side then on the other, catching the ball and throwing it in defiance of all rules. The nature of the girl and boy is that of the typical man and woman.

Her conceptive powers are so active she seems almost to divine unexpressed thoughts. She is also intensely enthusiastic. To this element of the feminine intellect the civilized world is indebted for an impulse for good unequalled in modern history. Like the mediæval crusades which advanced for

centuries the march of civilization, the woman's movement in the temperance reform has awakened in a few months an enthusiasm unaccomplished by the philanthropic labor of years. All this has been wrought by a band of peaceful, praying, suffering women, whose very sufferings have given them the touchstone which arouses the universal heart of humanity. Enthusiasts may make mistakes—they generally do—but what matters it so long as their errors are not vital. The first impulse to the great ship of reform, when launched on the sea of vice, always proceeds from them. In all works of benevolence, in all moral progression, woman stands in the front rank ; but the female population, which in our large Eastern cities must ever be largely in excess of the male, requires more than charitable labors to exhaust its energies. Hence arises a large class in the body politic of active, energetic, honest minds in no way utilized. Ask the statesman what is the effect of such a class on the nation. Yet there are enough avenues open to employment if that baseless public sentiment which places its ban on the woman who works for a pecuniary compensation could be overcome. Teaching has been monopolized by the sex in such numbers that often rare culture and conscientious labor receive a mere pittance. In literature, also, many find pleasure and profit. But numbers prefer an active executive life to one of quiet study. Shall all these rust in idleness or lose their rank in society? No ; never, if parents could see the beauty and dignity of labor. The wealthiest merchant educates his son to succeed him in business. Indeed, he would consider himself an unwise parent if the

young man were allowed to fritter away his time in whittling wooden ornaments (alias embroidery), or in giving orders to his tailor and hatter, and selecting shades of gloves. Yet the mind of the daughter must be similarly employed, for she can not be entirely idle and it is all she has to do. If the young lady is not needed to superintend the household, and is disinclined for literary pursuits, why not take her, too, to the store or bank? Would it be harder for a country lass to handle a garden-rake than a croquet mallet? Teach the girls to work—give them the same salaries their brothers receive for a like amount of labor. They will enjoy equally an independent income, and may lay something away for prospective need. Every woman should be educated to some trade or profession, whichever is best adapted to her mind. Because of the prejudice against labor many become teachers without any adaptation to the occupation, but rather harboring a positive distaste for it—a sad thing for them and the precious young minds given to their molding influence.

There is generally a subtle sympathy between daughter and father unlike that produced by any other relation in life. How might the long days of business toil be shortened to the old man by a bright smile or cheerful, merry word from the young spirit beside him! The boys are the pride of the household, but the girls are its sunshine; let them illuminate our banks and counting-houses, our farms, every situation suited to their physical power. It may be asked, "Would not this be destructive to the happy home?" By no means; where *all* work the hours of productive labor may be shortened without diminution of income, and the seasons of social family intercourse be lengthened and sweetened by the ever-blessed consciousness in each heart of having contributed to the general welfare. Home is woman's holiest, most blessed sphere; her first duty lies there; yet why should ladies of culture perform the drudgery of housework when their labor may be made more valuable. They will not do it. The saleswomen of our cities come from homes where no *servants* are found. God never made a woman to be but a pet and plaything, guarded from all useful employment by a tender, mistaken

love, based on false pride. Avenues of usefulness are open everywhere, but woman, too often, refuses to qualify herself to fill them until compelled by extreme necessity, and then suffers because none of her acquirements are marketable. No flowers of life can bloom along the broad path of idleness; it is trodden too hard by many feet wandering aimlessly hither and thither.

While upward on the toil-worn path
Man plods for self and neighbor,
The plantlets rise with swelling buds
To bless his faithful labor;
But when he learns in work for God
To find his highest mission,
The flowers of joy will shower their bloom,
And yield life's full fruition. LODOLA.

COQUETRY IN LITTLE GIRLS.

I HAVE noticed that boy-babies cling very tightly to the mother, but girl-babies soon like to sit and go to sleep in father's arms. Young girls hang about father, are so glad to see uncle, and conduct themselves archly with male company. I remember that in the district school the girls full as often as the boys got up social plays and forfeits. I recollect how eloquently they would sing, and how prettily and properly they would conduct their part of the entertainment. I have somewhere seen it stated that the cerebellum is developed with girls sooner than in the case of boys, and years previously to material desire. As a rule through life, is not love with woman more a mentality than with man? In the vicinity of my residence there are several nice girls, from six to nine or twelve years of age, among whom there is almost a jealousy in regard to which shall monopolize the attention of my youngest boy, who is very gentle in his ways, and likes girls for playmates.

Now for the point of my article. A neighbor with whom I was well acquainted had a daughter ten years of age. He had rented a part of his large house to a family consisting only of husband and wife—youngish folks. Before long he noticed that his daughter began to visit frequently their part of the house, and that she and the young man were getting to be great friends. His wife also was very fond of her company. Believing the man to possess good principles, the father and mother let the daughter take her own course with her leisure. She took a fancy to brush the young man's curly hair, to argue, and sometimes contend with him; and the more noisy and earnest the

pretended conflict or play, the more his wife laughed. Soon the girl grew larger, handsomer, more healthy, and when, at the expiration of four or five years, there was a removal, had come to be regarded in the community as a splendid young lady. She is now married to a noble husband, and they are considered the most superb couple in the region, and have two beautiful children.

Should any one say the girl was benefited by the exercise, the diversion, and added friendship, I should say, Yes; still, as I view it, there is another element to be acknowledged. I believe the female absorbs magnetic currents from proximity with the male; that there is an innocent coquetry, naturally designed to secure this advantage to her, while also it soothes, elevates, and draws out the admiration of the opposite sex; that the girl is queen and directress in social pleasures; and that parents and teachers should make provision so that, as often as twice a week at least, on suitable ground, or in a spacious hall, both sexes may assemble to do much as they list—sing, march, dance, or play, the understanding to be that the management of the occasion shall be mainly in the hands of the girls, and that every lad must be a gentleman. OBSERVER.

POSTSCRIPT.—Every one can see I am not

commending formal courtship, "sitting up," early matches, and other terrible abominations. What I do commend I believe would tend to create distaste for *all* the terrible secret vices. I hope to live to see the day when marriage will be the most deliberated of all the engagements of life, and about which the wisest counsel shall be obtained. Now it is left largely to impulse and fancy, and hosts of novels are written to illustrate and defend such unscientific mating. O.

[Our esteemed contributor is right in his opinion that girls develop earlier than boys, and that girls "take to their fathers," and boys to their mothers. That relation is the most perfect where the two natures, paternal and maternal, become so blended that both parents are clearly seen in each child. In a happy family, where there is deepest and most sanctified love, and other conditions favorable, children will be better organized in body and mind than those born to parents who quarrel or who do not love each other. There are children born in some families who are unwelcome. *Such* are indeed unfortunate. It is a most happy circumstance to be born of healthful, temperate, well-mated, loving, and Godly parents. *This* inheritance is above worldly riches.]

AGNES WORTH.

"OH, mother! I do get so weary trying and striving so hard with my work and securing so little for my pains;" and Agnes Worth, who had been looking discontentedly out of the window, rose and walked to another part of the room.

Her mother, a strong-faced, sweet-voiced woman, looked up sadly and sighed.

"Don't sigh, mother; it only makes me feel worse to hear you sigh. After all your effort for your children, it is cruel injustice that you should be brought to this."

"But, Agnes, the way is no darker to-day than it has been of late; you are only prostrated from over-work; to-morrow you will be all right."

"Never all right in my mind, mother, until the income I receive is larger. I can not earn money fast enough; indeed, I hardly consider that I earn it at all. Yet without it we can not live. The loss of it has lost us friends, home, independence, heart-ease, rest

—everything, in fact, but the power to suffer."

"And be strong," chimed in her mother.

"Be strong; yes, we must have strength to meet poverty. Sometimes I think it surely must be ten times as hard to those who have been above it than it is to those whose estate it is by birth. Hence it does take strength for us to meet it. Why, only yesterday when I carried back that law copying to Mr. Ellsworth, he condescendingly said to me, 'I suppose, Miss Worth, you will expect an invitation to my niece's party; you used to attend them.' 'The invitation would be merely wasted, sir,' I answered. 'Since my father's death, and even before, I have not gone out; save to work.'"

"Your reply was the correct one to make, Agnes; it surely had the desired effect?"

"He merely smiled as he counted out the money due me. Doubtless he was thanking his stars it was not his niece who had to go

to public offices for work. But I only guess his thoughts; I had no means of knowing them, as I left immediately."

Agnes Worth was a brave girl, despite her momentary petulance. She had been reared in comfort, and her father's position in society being a good one, she had known only the bright side of life. He had been a careless man in money matters, and had lived ahead of his income after his family had grown too large to be supported within it. Selfish, you will call it, and perhaps that is the right word to use, though his wife and children felt him to be generous to a degree.

He was improvident, shamefully so for a man who had such a family, but he hardly thought of the future, the present was so satisfactory to him.

A sudden panic shook the financial world to its center, and down into the gulf of bankruptcy went many a fair name and strong firm. In the whirlpool was engulfed every dollar that belonged to Mr. Worth, and behind it was left only debts, mortgages, and a helpless family.

It is easy enough for the rich and the solvent to sit in comfortable homes and speculate upon what they would do if misfortune came near; and it is even inspiring to think of the latent heroism one would discover in such a case, but the reality is far more harrowing and life-destroying to the proud of spirit than the imagination can paint.

To those who are forced into such a condition it is cruel beyond compare, and it comes hardest to the sensitive, who attempt to hide their condition from the world, and hope thereby to keep others from realizing their changed position. Death, in this instance, however, as it has in others, exposed it all, for Mr. Worth only lived till he saw his home sold, its beautiful adornments pass into other hands, and his family sheltered in a temporary abode, which, mean as it was, he could not pay for.

Yet he but partly suffered the agony his children experienced, for he was growing old, and they were just entering upon the active scene. He had passed by all the years of ambition and anticipation; to him life only meant comfort, and ease, and rest, and home. When poverty had deprived him of these, his heart was broken, and he died.

The young are tenacious of life, and they can not die so easily; and just in proportion as they have been blessed, so in like ratio do they suffer when the cup of sorrow is held out for them to drink.

Women feel loss of worldly possession more than men, for to them its regain implies ten-fold more striving. Men rub off sensitiveness as they come in contact with the world, and women grow less hardened the more they are crushed—that is, the better type of women do, and it was to this type that Agnes Worth belonged. She had been greatly admired as a girl, and as a young lady her generous, open-handed ways had won friends for her in all classes. Her fault, if fault it was, was her sensitiveness, and her trials resulted mostly from the anguish she endured on this account.

But she was strong, and she had taken the helm of affairs when there seemed to be no leader in the broken-up family. People shook their heads when they saw the grief and prostration of the wife after the death of the husband, and they expressed even more anxiety when they talked of the eldest son, the namesake of the father, whose seniority entitled him to the place Agnes filled. But he had no desire to offer himself up a whole burnt-offering, and he quietly withdrew as his sister stepped into the place he should have occupied. It was her sacrifices that enabled the family to live, her planning and contrivances that sustained them in those early days of poverty and trials.

Agnes had been struggling nearly two years, and in that time she had achieved a great deal, not only in money, but in experience and wisdom.

Yet at this time she was cast down; and she thought reasonably, for many crosses came to her that were not known to others, and yet they knew of enough to wear her out.

She had earned her money copying for lawyers, writing up books at night for the small milliners in the village, whose abilities were greater with their needle than with their pens. And she had made her woman's quickness aid her in her many tasks, and secure for her that success which usually comes only to those who have spent years trying.

On her earnings she relied for means to

support her parent and educate her sisters and brothers, and while she worked her mother watched over all, and made it home for them to be with her.

The times that tried Agnes most were the occasions that brought together all the young people of the place. Then she felt not so much the loss of the gayety she had never unduly estimated, but she suffered because her poverty excluded her from giving her sisters the opportunities she had enjoyed. And it was not Miss Ellsworth's party she regretted now, but the examination days were approaching at the old academy where she had been for so many years a pupil, and she greatly desired to take part in the reunion there, and be for awhile with her old school friends again. And it was this feeling of regret often uppermost in her mind at this time that had made her speak so despondingly to her mother.

One little sister was a pupil there, and she wanted to go on her account.

"Edna must go, mother; I shall have a dress for her in time, and you must go and see her acquit herself well. Mr. Bent told me she would certainly get the medal in her class."

"Ah, Agnes, he is your old teacher, and for your sake has helped Edna to secure this; but I can not go, it is impossible."

"But, mother, Edna will be unhappy if neither you nor I are there, and I shall be at my work."

It was easy to see the strained manner in which this was said, and neither Agnes nor her mother spoke for some moments after. By and by the stern look on Agnes' face relaxed into a smile, and she turned to her mother, saying—

"I have hit upon an idea, mother, that would be splendid if I could carry it out."

"Another plan, Agnes; you do too much thinking, child. But what is it now?"

"This, mother: Mr. Bent, you know, offers prizes to the classes for the best essays, and these prizes are valuable. Now, I am going to him and propose that he offer a prize of fifty dollars for the best essay by his old graduates; there are any number of us here, and he can let all of them know of it. If he would, I should surely win it, mother, for I have the motive which none others have. I have poverty."

"But could Mr. Bent afford so much money? It is a novel idea, and it would please him, but could he do it?"

"Why, I can overcome that difficulty, I think, by urging him to let the honorary members of the Board put up the money; they have never helped him in any way, and he is always bringing credit upon them and upon the town, for the Academy Commencements always draw great crowds from other places."

"Will you go and see him?"

"I will ask him to come here, and then tell him. I lose all enthusiasm when I go near his wife, and with such a plan as this I could not face her; she will not understand me. Her influence is selfish, and the moment I get where she is I begin to back."

"Be careful, daughter."

"No slander, mother; our temperaments are not congenial, and nature is alone to blame, if nature can be blamed for its unlikes. Mr. Bent is all sociability, and full of faith in others; she is selfish—that is the difference."

Of course Mr. Bent quickly accepted the proposition of the hopeful girl, and at once entered into all her plans.

"The very thing," he said, "to make the examination brilliant. I was wishing yesterday I could have the Commencement a great success. Now how can I thank you for helping me out?"

"By keeping silent as to the origin of it," answered Agnes, "and waiting a day or two before you work openly in the matter. Get your crusty old nabobs to subscribe the money first, then issue your proclamation. Send out circulars in all directions, and print on them the names of all your old graduates."

At length the commencement days arrived, and never were June days so lovely as these. The younger classes were examined the first day, the seniors graduated the next, and the third was to be devoted to the essays of former graduates. Many letters had been received from far-off homes regretting absences; others still from nearer home acknowledging that they could not compose essays after three years' absence from school. Others still thought they had nothing of interest to say, and would hear those who had. Two thought it unwomanly for married ladies thus to com-

pete for publicity. Four were dead, and nine answered to roll-call on that eventful day. Agnes was among them, the plainest in attire of all, but the most interesting sight to be seen. She was poor, was earning her own living, was out of society, and was therefore a new topic to many. Her old classmates gathered about her, and not a few were generous enough to hope she might win the prize, as she had done once before when they all were there together.

Six essays were read during the day, three in the forenoon, three in the afternoon, and the remaining three were to be delivered in the evening. But two ladies out of six had read their productions. Mr. Bent and a gentleman had divided the honor between themselves at the request of the ladies. The evening lecturers were to read their own work, and at the conclusion the vote of the committee was to be taken, and the prize to be presented.

The grand old building was crowded to its utmost capacity. Young and old were there; everybody in the village was excited over the contest, and not a few sly wagers had been staked upon the different competitors. Some of the essays had been excellent; and had they been as well delivered as they were written, it would have been difficult to decide the question.

Agnes was to read next to last. The choice of places had been given to the daughter of an old benefactor of the academy, and Agnes had selected the next position.

"If I fail," she had said to her mother, "Marion will get it, and I shall be glad for her to have it."

A prayer was offered when the vast congregation had been seated, and during it Agnes felt her strength increasing. It seemed a special benediction to her, and afterward she was as calm as she had before been nervous. While the first essay was being read, she watched the speaker and her audience, and gained a perfect command over herself by accustoming herself to the gaze of so many eyes.

It was not a poor effort by any means that won her old schoolmate so many flowers and such hearty applause, and Agnes knew when she stepped forward that she had to do her best or lose her triumph. She could not

afford to lose it, for it meant more to her than to the others, and she so longed to win the money that her family needed so much.

Looking out upon that vast throng she saw only her mother and the children grouped about her. She had no paper in her hand as she moved to the table, and only a small note-book in Mr. Bent's hand was all that was seen. In clear, low tones she began her oration. Her elocution was perfect, and her voice was so mournfully sweet that she won the attention of every one present. She had studied her theme well, knew it word by word, would know it word for word as long as she lived, for she had suffered and she knew the power of sorrow to strengthen memory. Her theme was well chosen, and fitting both for herself and her hearers. "Yesterday and To-morrow for Women" was the subject from which she drew her word-pictures; and from the place of woman in the morning scenes of the crucifixion, in the after-times of the resurrection, and down to those lonely days after the ascension, she told of her trials and rejoicings, and of the defenseless condition in which she had stood through the centuries of ages in which man's brute force alone was recognized. Slowly, step by step, she brought the lesson of the yesterday to bear upon the to-morrow of their existence, and then asked for that love and justice which should gladden the to-day of their lives—the ever-present now. Her appeal for the sympathy of the world for the helpless, in these the days of manhood's valor, was appropriate, carrying with it, as it did, the promise given to those who are merciful. And when she had concluded the applause was deafening.

Again and again the house rang with the cheers of children and the noisy demonstrations of her friends. Old men stood on their feet waving their handkerchiefs, and ladies wept as the exhausted girl bowed low to the throng and resumed her seat. Every one near her pressed forward to say a word, while the audience again gave her a hearty round of the enthusiastic applause they could not contain. She had won all hearts, and the last essay was left unread. The applicant, fearing the risk of a reading after that address, agreed to withdraw from the contest in favor of Agnes; and, without leaving

their seats, the judges unanimously voted it to her. A gaily-ribboned white envelope was handed to her, and then, regardless of the request of the president for silence, the throng gathered about her and claimed the pleasure of sharing her joy. She had tried hard, had won bravely, and the huzzas of the moment were her's to accept and enjoy.

But more to her than the triumphs of the passing moment was the sense of personal power she had gained in the effort she had

made. She had suddenly, and for the first time in her life, discovered that her talents had been toyed with—that her opportunities had been thrown away. Hitherto she had only dwelt upon her weakness; henceforth she should test her strength. And when a woman, who has need of strength, in a supreme moment finds out that she possesses it, the terror of toil is lost, and before her lies not alone the possibility of effort, but the certainty of reward—the surety of achievement.

LAURA C. HOLLOWAY.

THE MOTHER.

OH! if there be linked with the gloom of existence
One feeling, that deepens the darkness it wears,
'Tis a fond mother's fear, that foresees, in the
distance,

Her infant sent forth to the world and its snares.

Shall that face, a sweet well-spring of smiles, soon
be sadden'd,

Those weak trembling hands be uplifted to sin?
Shall the heart, which scarce heaves on her bosom,
be madden'd

By pain from without, or by passion within?

Is there none, then, to care for the desolate
stranger,

Who goes, all unheeding, unarm'd, on his way?

No spirit of might to walk near him in danger,
And scatter the fiends that would make him
their prey?

Oh! yes, there is One, and besides Him no other
The Redeemer, the Ruler, whose throne is on
high! [mother,
From the glories of heav'n He beholds the sad
'Mid the songs of the angels he catches thy sigh.

Go, take thy sweet babe, and to Jesus confide
him, [fears!

He has dwelt in our flesh, he can feel for our
Take this lamb to the Shepherd, who safely will
guide him

Through the desert of perils, the valley of tears!

A SUMMER'S VACATION.

IN fall and winter we have such general holidays as Thanksgiving, Christmas, and New Years. In spring and summer many city folks have vacations—mile-stones on the road through life. All these are what the English call "Red-letter days," being devoted to rest, recreation, recuperation, and rational enjoyment.

Last summer, when many of our people went to Vienna to see the show, a little band of editorial and artistic spirits—in the body—took counsel of one another, and projected an excursion, which would permit them to see something more of their own great country than that bounded by their "sanctums" and studios.

They were careful to select kindred spirits, such as would readily fraternize and severally contribute by thought and deed to the success of the excursion. There were thirty or more—husbands, wives, with full-grown lads

and lasses, bright, brilliant, witty. The only rivalry consisted in each trying to make himself the most agreeable in conferring kind attentions on his neighbors. All barriers of cold formality were left behind, and the company resolved itself into a co-operative or associative family institution. It was an excursion party of literary, scientific, and artistic brothers and sisters out for a six weeks' play-spell.

Each person was a host in himself, armed and equipped with pen, pencil, and paper, hammer and chisel, taking notes, making sketches, pumping strangers; each representing some useful, widely-circulated, and influential journal, and together aggregating more than a million of circulation!

Here are the names of most of the party, and the papers for which they wrote:

MR. HENRY T. WILLIAMS, of the *Horticulturist* and N. Y. *Independent*, by unani-

mous consent, was captain or manager of the party; S. R. Wells and wife, of the PHRENOLOGICAL JOURNAL and of the *Science of Health*; A. S. Fuller and wife, *Rural New Yorker* and N. Y. *Sun*; Edward King, *Scribner's Magazine*; Thomas Mehan, *Philadelphia Press* and *Gardener's Monthly*; Josiah Hoopes, *Journal of the Farm* and *Christian Union*; David H. Strother—"Port Crayon"—artist, *Harpers' Weekly*; R. P. Eaton, N. E. *Farm-er*; Rev. W. Clift, *Country Gentleman*; G. C. Woolson, N. Y. *Agriculturist*; X. A. Willard, Author and Dairyman; B. K. Bliss, Rural Club, N. Y.; N. J. Coleman and wife, St. Louis *Rural World*; M. S. Dunlap and wife, Chicago *Tribune*; C. W. Bryan, Springfield *Daily Union*; B. D. Evans, Westchester *Record*; William P. Thompson and wife, Dept. Agriculture, Washington; S. A. Ellis, *Rural Home*; T. S. Gold and wife, Secretary Board Agr., Conn.; Rev. J. W. Tuck, Norwich *Bulletin*; Samuel Bowles, Jr., Springfield *Republican*; C. V. Riley, entomologist, *Journal of Agriculture*; Prof. A. H. Mixer, Rochester *Democrat*; Herman Fiechsel, artist, *Aldine*; Mary L. Clancy, Troy *Times*; Miss Warren, Hampshire *Gazette*; Arthur Lumley, artist, London *Graphic*; D. L. Hall, *Western Rural*; J. E. Liller and wife, Colorado *Gazette*; Miss Kirtland, *Evening Post*; M. H. Bartow, N. Y. *Evangelist*.

And this is the route our excursion party took:

We left New York by special train—complimentary from Pa. Central R. R.—for Baltimore, over air line; thence to Washington, by Baltimore and Potomac R. R.; thence over the B. and O. R. R. to Harper's Ferry, where we stopped the first night, and visited the battle-fields, and also the armory, prison, and other places where John Brown commenced the great Rebellion.

From Harper's Ferry we continued south by the Virginia Midland R. R. up the Shenandoah Valley, *via* Staunton; thence over the Chesapeake and Ohio R. R. to Charlottesville, Va., where we enjoyed the hospitality of the Central Hotel. The Messrs. Hotchkiss, of Staunton, gave the party much information; and Mr. A. H. Perry, the polite Superintendent of the C. and O. R. R., with Messrs. Fisk & Hatch, furnished a special train, which conveyed the party over their Chesapeake

and Ohio R. R., *via* Afton, along the Blue Ridge to the White Sulphur Springs, where we rested the third night.

Next morning we proceeded by the same railroad, visiting salt works, iron and coal mines, and the wonderful scenery of the Kanawha and New River cañons, to Charleston, the capital of West Virginia, where we were most sumptuously entertained by the Mayor, members of the press, and other dignitaries of that enterprising city. From Charleston we went to Huntington, where we were met by a delegation of citizens, who gave the party an excellent dinner and a carriage ride around that new and rising town. Here we took the steamer "Fleetwood," Captain Campbell, for a moonlight sail down the Ohio River to Cincinnati, where we spent our first Sunday, and were comfortably lodged at the Burnet House.

On Monday morning, 21st July, we were passed over the Ohio and Mississippi Railway by Mr. Chrystie, Vice-President, to St. Louis, Mo. Here we were quartered at the Southern Hotel. The party took carriages and visited Shaw's Gardens, the Fair grounds, parks, etc., piloted by Col. Coleman, of the *Rural World*. We now take our Pullman Palace Car, with just enough room for the party, and were soon speeding over the Missouri and Pacific R. R. for Sedalia. Here we take a special train over the Missouri, Kansas, and Texas R. R., through the beautiful and magnificent Indian Territory—which, as now managed, seems to block the wheels of progress and civilization—and so on to the new town of Dennison, in Texas. Here we breakfast, and push on over the Texas Central R. R. to Corsicana. The party was entertained by the citizens of Dallas in the Town Hall, where speeches of welcome were made by members of the State Legislature, and by other prominent personages. Here in Texas are the great pasture lands of America, where herds of cattle numbering from 20,000 to 100,000 head and more are owned by single individuals. Here may be raised corn, cotton, wheat, oats, barley, fruits, etc., in greatest abundance. The lands are rich, the climate warm enough for cattle to winter without shelter or extra feeding. The same is true of horses and of sheep, which are grown here in immense herds and flocks.

Three or four men will guard a herd of 5,000 or more cattle.

Returning from Texas, we again pass through the Indian Territory, hundreds of miles, over excellent lands, wooded and watered, but sparsely settled by indolent Indians, who are treated as wards—not as citizens—by the general Government; no one owning an acre of land in his own right, though occupying millions of acres. We protest against the present policy, and demand in the true interest of the Indians that they be allotted each a farm, and that this Territory be opened to white settlement and civilization. After providing farms for every Indian, man, woman, and child, let Government sell to actual settlers other portions, and place the proceeds on interest to the credit of the Indians. Some such policy must be adopted, or we shall have serious trouble, where all should be peace and prosperity.

We come now through Southern Kansas, accompanied by Mr. G. W. Gue, Land Commissioner, who knows all about that great country, up the Neosho Valley, into a country fast filling up with the most enterprising and thrifty of Eastern people. We switch off the M. K. and T. R. R. at Emporia, and switch on the Atchison, Topeka, and Santa Fé Railway, A. E. Touzalin, Manager, which takes us up the Arkansas Valley, near to the borders of New Mexico. Can it be that this rich and lovely valley is now for the first opened to civilization? The beautiful river, the rich green grass, and the long lines of tall trees following the water courses, dotted here and there as far as the eye can reach with herds of growing cattle, remind one of the moors and downs of England rather than of a wild waste in the once so-called Desert of America. Here was the home of millions of buffalo, elk, antelope, deer, and of the Indian. It is now, thanks to railway enterprise, opened to farmers, who may possess almost for the asking an earthly paradise. This is among the richest and most beautiful sections of our western country.

Returning from the Arkansas Valley, we come to Kansas City, and take a train on the Kansas Pacific R. R., Mr. Keim, Gen. Pass. Agt., and proceed up the beautiful Kaw River, across the plains, through the buffalo country

to the Rocky Mountains. We stop at the American House, in the City of Denver—a young Chicago, nestling at the base of the everlasting hills filled with precious metals. Here we rest, write up our notes for publication and write letters to friends at home.

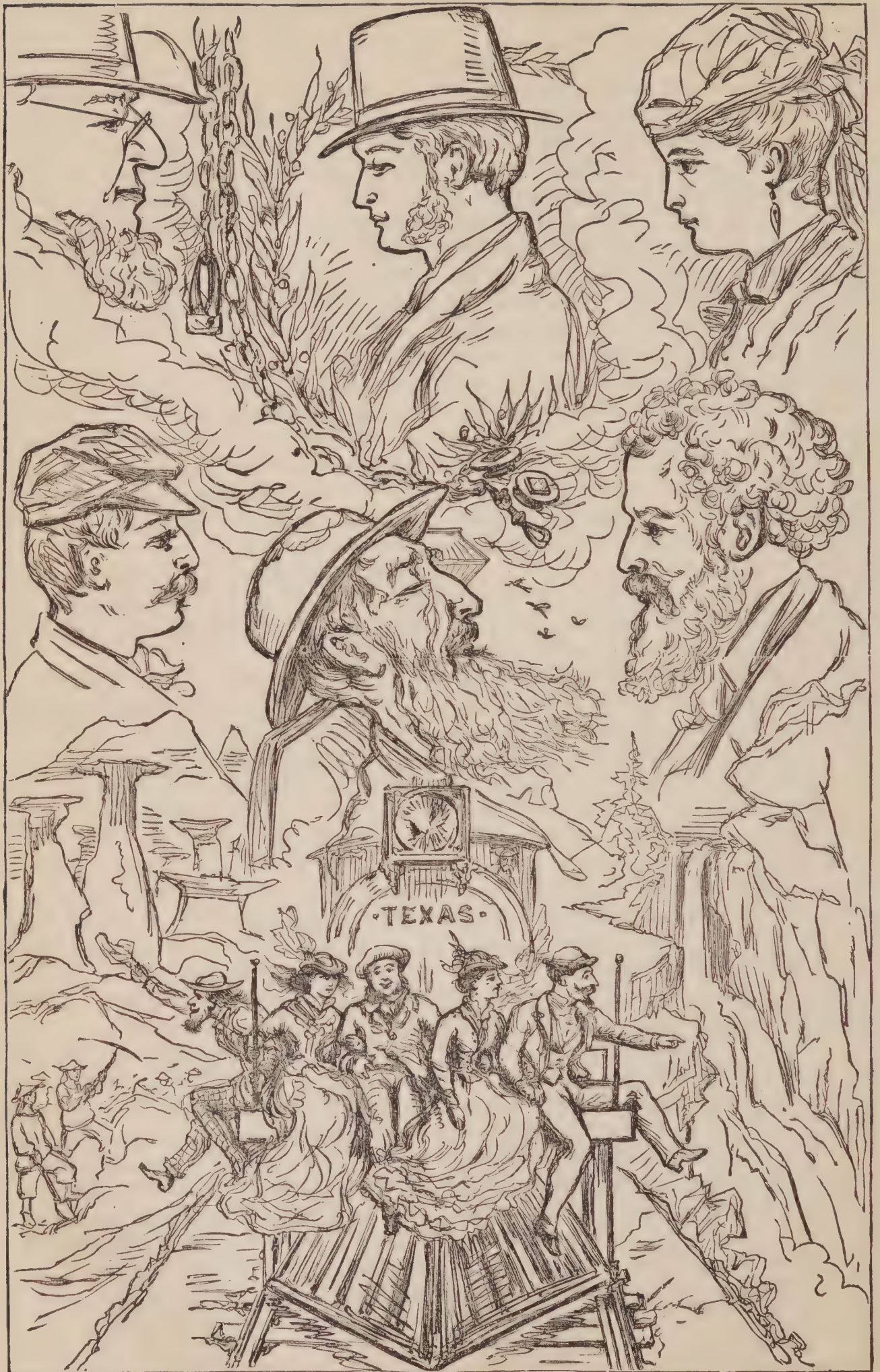
The Denver and Rio Grande Narrow Gauge R. R., Mr. Borst, Superintendent, passes the excursionists on to Colorado Springs, Garden of the Gods, Monument Peak, Pike's Peak, Williams' Cañon, etc., where the party sit for a picture in group, with the grand old mountain fourteen thousand feet high for a background.

From the Springs—Saratoga of the West—we push on to Pueblo, in Southern Colorado, and are the guests of the city. We take carriages, and visit the park and grounds whereon aspiring citizens propose to erect a State house and other public buildings for the accommodation of the Legislature. At this to-be-capital, Mayor Rice, Ex-Governor Hinsdale, Mr. Stone, and others, including members of the press, gave the party a dinner at Burt's Hotel.

CAMPING OUT.

Returning to Denver, we procure an outfit for a mountain tour. Horses, saddles, carriages, tents, provisions, fire-arms and fishing-tackle being procured, we put out for higher altitudes. Now for scenery. We "go for" the great Middle Park, Clear Creek Cañon, Idaho Springs, Georgetown, Black Hawk and Central Mines, Boulder Cañon, Caribou, and other wonders. We climb Grey's Peak, 14,250 feet high, and view the horizon all around—snow-capped peak on peak, as far as the eye can reach. Once seen, can such scenery be ever erased from one's memory?

Returning to the plains after a two weeks' wild life away up in the skies, we run down to Golden, Greeley, and so on to Cheyenne (pronounced Shy Ann), in Wyoming. Here we take a Pullman car for Laramie City, Sherman, Ogden, etc., over the Union Pacific R. R. for Utah. Arriving in Salt Lake City—home of the saints—we put up at The Townsend House, where we felt perfectly at home, although in this nest of the terrible Mormons. In three days we did Salt Lake City and vicinity. We visited the mines, quarries, cañons; crossed the river Jordan (pronounced Jurden, by the saints) climbed to



OUR EXCURSION PARTY.-1.



OUR EXCURSION PARTY.-2.

the top of the Temple; played "Hail Columbia," "Star-Spangled Banner," and "Old Hundred" on the big organ; met some hundreds of happy Sunday-school children, who sang their hymns and carols with a will; dined with the apostles; heard speeches of welcome, and made speeches of thanks amid as healthy and as happy a throng of human beings as one could wish to meet. On this occasion brother Brigham declined to be interviewed by these thirty or more mental artillerymen, who had unsheathed their pens for the expected opportunity. But the party were taken hither and thither, by rail and by carriage, all through this charming valley, where thrift and prosperity reward industry, enterprise, temperance, and economy. We had a delightful visit among the Mormon people, and left them with a desire to know more of them and of the charming country they have by hard work developed into the beautiful city and country it now is.

Leaving Salt Lake in high glee, the party resumed seats in their Pullman car, and were led on through Echo and Weber cañons, past Devil's Slide, Devil's Pulpit, and other sightly places with barbarous names on the Union Pacific R. R. Across the mountains and through Nebraska, along the Platte Valley, through fine grazing and farming lands to Columbus, where we left the track for a carriage ride into the heart of the finest portion of the State. Mr. O. F. Davis, Land Commissioner, was our pilot. Columbus sought the capital, Lincoln obtained it. Columbus will have the State University, and, what is still better, is in one of the richest and most beautiful sections of the State, including the home of the friendly Pawnees.

On and on we go toward the morning's sun. Here is Omaha, a sightly city, on the west bank of the Missouri River, overlooking the country in all directions, the beginning or termination of the longest line of railway in the world, connecting the Atlantic with the Pacific—what a conception was this great undertaking! Omaha, center of the great Republic, seeks to become the capital of the Union, because the most central. We respect the people of Omaha, and trust they may escape so severe an infliction.

"All aboard for the East." Messrs. Riddle, Royce, and Drew will be long and gratefully

remembered for their polite attentions. There are beautiful flower gardens at all the stations on the Chicago, Rock Island, and Pacific Railway, which carried us across the most fertile portions of beautiful Iowa, through the Des Moines valley to the "reconstructed" city of Chicago. We put up at the Grand Pacific, and enjoy such a bath and such a feast as a tired traveler only can enjoy. If this Grand Pacific is not the culmination of fine hotels, we do not know where it is to be found. We leave it with reluctance. Now for Calumet, the parks, and other suburbs, after which we take the train for Pittsburg, over the Alleghany Mountains; through Pennsylvania, on the Pennsylvania Central R. R., to New York.

We were away nearly six weeks; traveled nearly eight thousand miles, and returned, each to his or her home without an accident, and without the loss of a button. The entire expense was not more than that of a trip of half the distance in Europe, while the interest to one and all was of the highest, from the start to our return. It was in every respect most pleasant and profitable.

On this, as on a former excursion, when we took in California, with her wondrous big trees, her geysers, and her Yosemite, we had daily lectures, by one or more of the party, on agriculture, horticulture, stock growing, fish-culture, tree-culture, botany, geology, ethnology, mineralogy, and the entire range of subjects interesting to editors, artists, farmers, naturalists, and others. Each member played his part, rode his hobby, sang his songs, giving and taking freely of the best. We fell in with leading railway men, agents for land-grants, governors, statesmen, bishops, explorers, miners, hunters, soldiers, Indians, cattle-herders, missionaries, Chinese, Japanese, each of whom was laid under contribution for our information. We applied the mental pump alike to white, black, and red; each of whom seemed happy to tell us all he knew. We took notes and sketches; we pulled up specimen plants and grasses all the way from New York to Texas, through the territories, on and over the Rocky Mountains; we gathered minerals, marbles, bugs, skulls, seeds, flowers, and have them now carefully preserved in books, boxes, and cabinets.

The party was most courteously received

by citizens all along the route, and frequently entertained by municipal authorities. Can there be a doubt that we had "a good time?" Our artists gave many striking illustrations of what they saw, and splendid paintings of Rocky Mountain scenery now adorn the walls of liberal citizens, the work of our artist excursionists. We give outline portraits herewith of several members who were more or less conspicuous, together with

HUMORS OF THE EXCURSIONISTS,
kindly contributed by one of the party.

Amid the sober realities of excursion life, and its daily business of gaining information or taking notes, there was a jolly spirit of fun and good-humor pervading the entire company. Every day had its spree and gayeties; daily acquaintance brought out new peculiarities of individuals, which made them the target of good-humored jokes, of which the artist was not backward in taking advantage by the use of his caricaturing pencil. Each played his part, and no happier company ever crossed the Great Plains.

Let it be our cheerful pleasure to introduce to our readers, in a pleasant way, some of the characters figuring in the accompanying sketches—premising with the statement that no offense is intended to individual feeling.

At the top of plate 1 is the youthful face of the *Commander of the Excursion*. The cares of an 8,000 mile trip, and the constant watch for the comforts of thirty-five companions, sit lightly on his shoulders. With total abnegation of self to make others happy, he escaped the arrows of the critic. His greatest ambition was to be "*promptly on time*" and return the group safe and in good feeling with each other. A "little dictator" to some, still to all genial; he was yet bound to have "*everything exactly right*." Trains moved at the music of his "*Silver Whistle*," and dining-stations waited eagerly to reserve their best tables.

His greatest fault, "he liked the ladies but stuck to nary one." Bashful in the extreme, yet once a self-constituted champion of a pretty girl, on a Mormon picnic, we think the icicles of his bachelor heart have begun to dissolve, and even in our engraving his glance is half turned to the fresh and happy face behind him.

Close at hand is the winning face of "Birdy," the "jolly maiden" and "lively girl" of the company, the heroine of a midnight sociable (near a graveyard) on top of the Rockies, when, by the light of the camp-fire, she stirred the souls (and heels) of the parsons, made us all

young and frisky to the fun of "*Chase the Deers*," who captivated the artists, and planned the serenade of the Commander in his tent, (perhaps she knows who knocked over his candle).

Below is the visage of the celebrated *Turnip Grower* of New England, the Secretary of the great "I Know Beans Society." Worn-out with taking an exhausting series of notes on the soil, fences, cattle, etc., of the journey (which we never saw printed), he sleeps with head and hat just ready to fall out of the open car window.

At the top of plate 1, also look at the face of the *Great Trout Fisher* of the expedition. See the sublimely satisfied face, taken just after he had disposed of a grand good meal. He seems just ready to write the 427th Psalm,— "How thankful am I for the good things of earth, for the good bed I found (in a barn) last night, and that delicious beefsteak, that brimming cup of coffee (wish I had another) and that big piece of cheese. Truly it increaseth my joy, and stimulateth the springs of my affection."

At the right hand of the center is the handsome phiz of the great *Buggist*. How glibly he rattled off the "jaw-breakers," of "Lepidoptera," and sundry other names of insects, distracting to our "Ellemagoozllum." He'd leave a meal to chase a butterfly; stop a procession to turn over a stone or fight a rattlesnake in his way. Just fit to match the idea of the little urchin, who wrote of "Jolly old Uncle with a glass eye." Earliest to rise, last to go to bed; like the industrious flea, never still; when you wanted him, he wasn't there; whose wife lived on "pretty tea," and he on *crackers and milk*.

At the left hand of center is the *Mark Twain* of the party; one of those who spoke "steady by jerks," and each "jerk" a "button-burster." As tragedian in some midnight theatricals on Pacific Pullman car, where foot-stools became head-boards, and chairs with occupants assumed horizontal positions, unsuspecting ladies found *beaux* before they expected, and sundry spiritual manifestations appeared, accompanied with solos and orchestra accompaniments which beggar description—his fun was irrepressible. A real Robert Ridley, O, whose sayings were sharp as vinegar pickle, and whose bottle of fun was like a steam-engine at high pressure.

In the vignette, at bottom of plate 1, behold a picnic of joyful spirits on the pilot of the locomotive. The young botanist leaning back, is happy with excitement; in his arm is

tucked the hand of the Penn. school marm, while prudently she hangs with the other to the flag rod. At the right is "*Don Mustachio*," with the hand of another man's wife tucked under his arm, pointing to the delicious flowers—ah!

The frisky botanist waves his flag to the astonished "Chinee," who don't understand the inestimable privilege of a "special train." Think of such a ride for hundreds of miles through the Indian territory, thermometer 96°—under the bluest of skies, and over the greenest of prairie grass!

Plate 2 introduces a scene of comical reminiscence. An observation car was attached in the rear of our train while passing through the deep Virginia cañons which line the Chesapeake and Ohio R. R. Most of the party were gathered upon it, looking upward at the towering rocks. The R. R. Superintendent directed the attention of all eyes to a tunnel cut out of one solid rock; the train entered, and while all faces were still looking upward, it as suddenly emerges; a little stream leaping from the bank, poured its volume directly into their faces and open mouths, deluged them with a cold shower bath. There never was a more astonished set of mortals, and the wry faces with rapid display of handkerchiefs were comical in the extreme. Just at rear of this car, unconscious of the coming wave, is the genius of the "Union" with "cotton umbarell."

How shall we do this valiant man justice? 'Twas he that ascended Gray's Peak on foot, supported with a tooth-pick and a fire—'Twas he that came down first and got the best dinner.

By his side is the visage of the *Baggage Smasher*. He smokes the pipe of victory. "Forty pieces, and not one missing." He was iron-clad; could sleep on corn stalks or wagon floors, a log for a pillow and straw for a blanket.

On the right corner is the figure of our philosopher—the *Modern Diogenes*. He is just taken in his great act as "Inspector of Dinners." "I wonder what this meat is made of," and the first dish at dinner is turned up sideways, endway, and all ways. His greatest puns were made when he was eating, and his daily proverb was: "Before your neighbor is in sight, go-a-head."

At the bottom is a sketch of the *Parson*, taken just at the time when delivering his most overwhelming *snore*. He could "tuck out" snores by the square yard, and when he "tuck in" breath, the tent sides shrunk. No musquito ever ventured near with such sounds of

war within. He could overturn more cups of coffee spread on the grass, while on his march to the breakfast table, and the ways of his feet were "past finding out." He was celebrated for his patience and his *carpet-bag*, which the mischief-makers hid whenever they had a good chance.

That round face, just peeping out from the straw hat, is *Our Boy*, just from Yale, and full of "kitterchisims" of roguery; voice like an eagle, legs nimble as a deer; the fountain of mischief never lost exercise. Tender as an Aeolian breeze to the skool marm, yet wild with delight at the scenery and the beautiful plants.

Port Crayon's sparkling eyes are watching us over the broad-brimmed spectacles, as he seems to say, "Boys, go it when you're young."

At the bottom of the plate is "ye artist." Observe ye graceful ease as he sports over the cotton bales, that lovely summer eve, as we sailed down the Ohio.

The "little nig," in balcony above, is pre-meditating mischief, and before he is aware, "charcoal sketches" will push "crayon" forcibly out of sight.

On both sides of the vignette are the faces of the *Professor and wife*. He, handsome, and, in the inspiring atmosphere, the picture of health; she, kind to a fault, and the loved of all, thinking of the parting day when their happy excursion joys are to end, and the long good-bye is to be said. Of him might be said the motto, "First for a speech, next for the heads of my countrymen." Of her, "She openeth her mouth with wisdom, and in her tongue is the law of kindness."

In the centre of the vignette is represented the famous Camp Meeting, in the valley at the base of the Rocky Mountains. The *Great Bump Analyzer* is telling us how good we are, and says he will tell us how bad we are for \$5 more to a crowded audience, with unbounded applause.

"Ah!" said he of Diogenes, "you are wrong side out." Quoth Diogenes, "Don't tell me any more, it might spoil my dinner." Of "ye artist," he says, "Samivell, beware the vidders." Of the Buggist, "Take care of the *pence*, and let your wife take care of the *pounds*." Of ye Orator, "Born to be great, but Providence stopped short; *plaster gin out*."

Need we repeat all the fun made of the other members of the party—of the "medicine chests, the contents from *podophyllum* to phosphate of lime;" of that soft-voiced son of New England, with heart touched sensitively by a

pretty face, and alas! wandered from the fold; or of that other artist who slept so long in the morning, and was the terror of old "Turnip Top" the early riser; of that exceedingly proper one, who got so "riled" at undignified pronunciation; of the great Stump Orator, who, plumed for most entrancing speech, but was cut short by the circus; of *Mrs. Sam Jones*, the Patron Saint of the cider barrel, a doubting *Thomas* who believed in the molasses can.

Their fun has all passed into our historical

memories. "We ne'er shall look upon their like again."

CONCLUSION.

Thus we took our summer's "play spell" So far as we have heard from our fellow-excursionists, each returned to his or her home with pleasant memories, greatly refreshed, invigorated, enlightened, and all every way better fitted for their several duties as journalist, artist, preacher, teacher, and citizen of this Democratic Republic.

THE REAL LADY.

SOME one having read our portrait of "A Real Gentleman," in the May number of this JOURNAL, asks for a delineation of the real lady. The real lady, or, as seems more to the point, the *true woman*, is the highest type of our humanity. She is, indeed, as the wise man said in that lofty ascription in Proverbs, "of a price far above rubies."

We can not think of a model woman in the sweeping robe of gay colors and the elaborate coiffure which distinguish the ladies of modern society. We are not able to discover her in the fashionable who is so much given to attendance at the play-house, or the ball, or the "select coterie," where dances and refreshments of the most highly-seasoned quality are the attractions. We can not associate her with those listless, idle ones who loll in bed long after sunrise, spend hours before the mirror, and waste the small remainder of the day in shallow gossip or a round of useless shopping.

She is by no means the lady of our choice who regards home and the companionship of her children as tiresome, and the responsibilities of domestic life as a grievous infliction; who deems it vulgar to conduct the affairs of her own household, and dwells with pride upon the fact that she is rarely seen in her own kitchen. How much such a one realizes the lofty character of that Bible housewife whose "works praise her in the gate!"

The true woman never rules except by voice and manner which are at all times gentle, kind, and winning. Is she grieved, reproached, insulted? She bears herself right patiently, and if opportunity offer she firmly demands that justice be done her, and that

her character be vindicated. Indeed, she lives above slander, and in the midst of any misfortune she is calm, steady, and hopeful. In bereavement she bears the keen shaft with unfaltering resignation to the will of Him who giveth and who taketh away. She has no sympathy with the scandal-monger, no favor for dissimulation or untruth of any kind. She apes no false delicacy, tolerates no prurience in act or word, hesitates at no necessary service, however menial or disagreeable.

In the care of her children she takes peculiar pride, esteeming it a high privilege, rather than a duty, to watch over them and provide for their health and comfort. Her husband has her highest esteem and confidence, if he be a worthy husband to her. If he be unworthy—but the woman we have in our mind's eye is by no means likely to make a mistake in her choice of a companion. She does not marry because a good figure or a vibrating voice has caught her fancy. She does not resign herself to mere impulse. Appreciative of the duties and responsibilities of wifehood, and deriving instruction from the lives and counsel of the married around her, she is slow to decide a matter of so much importance to every woman as marriage.

She does not contemplate life from the point of view of personal emolument or sense gratification, but deems herself rather as one of the instruments endowed with life and capabilities by the great Unseen for the furtherance of His grand purposes. She believes she has a sphere to fill, duties to perform, and wherever she may be, and whatever her sta-

tion, the opportunities afforded her for action indicate that sphere and suggest those duties. She believes especially that it is woman's function and high privilege to minister at the very fountain of human life and happiness, and that the better fitted she is for such ministration, the more exalted is her usefulness and the more potent her influence.

In short, the real lady and true woman is a high-toned and sincere Christian, in whose nature there is not a shred of deceit or hypocrisy, and whose life is luminous with truth and beauty. How grand and apposite the picture given us by Wordsworth :

I see her, upon nearer view,
A spirit, yet a woman too.

Her household motions light and free—
The steps of virgin liberty ;
A countenance in which did meet
Sweet records, promises as sweet,
A creature not too bright or good
For human nature's daily food ;
For transient sorrow, simple wiles,
Praise, blame, love, kisses, tears, and smiles,

And now I see, with eye serene,
The very pulse of the machine,
A being, breathing thoughtful breath,
A traveler betwixt life and death.
The reason firm, the temperate will,
Endurance, foresight, strength, and skill,
A perfect woman nobly planned
To warn, to comfort, and command,
And yet a spirit still and bright,
With something of an angel light. D.

HOW TO TRAVEL AT HOME AND ABROAD.

AMERICANS are said to be the best travelers in the world. Having a large country, with extensive facilities, railways, rivers, lakes, and thousands of miles of sea-coast, with good hotels—said by strangers to be unequaled elsewhere—and speaking one language, everybody here feels quite at home, whether in city, village, or country. Traveling, with us, is cheap and comfortable, but the thing has not yet been reduced to a science, nor to a minimum of cost. We must bring the luxury of comfortable travel down to the circumstances of the comparatively poor. When we can step on board a railway train and be safely and quickly conveyed two or three hundred miles for two or three dollars, all, old and young, rich and poor, will manage to enjoy the pleasure, and receive thereby both recreation and health. This thing may be done, should be done in the interest of neighborly feeling between the several sections of the country and good citizenship. Suppose a party of a hundred, or more, arrange for a special train to convey them from New York to Philadelphia, Baltimore, Washington, or to any other point, and return. The cost to a railroad company would chiefly consist in the use of locomotive, coal, cars, and men to manage the train, adding estimate for wear and tear. Then a percentage being added to represent a fair profit, we have an amount on which may be calculated the cost for each

passenger of the party, and it would be but a trifle. Such parties, composed of merchants, mechanics, manufacturers, clerks, with their wives, would be delighted to take a trip to Niagara—go one day, stay all night, and return next day—all for four or five dollars, or less. So small a sum, indeed, that half the inhabitants of New York would jump at the chance. The railway company should figure to see how cheaply they could do it, rather than how much they may make by it. There should be a series of weekly excursions, through the summer, over each of our great railroads. Think how many happy hearts such excursions would make—new and pleasant acquaintances would be formed, interesting places visited, while both knowledge and health would be increased. Churches, literary societies, library associations, etc., could combine and make up delightful parties. Would not this be better than to go alone, at present high prices? We trust enterprising men, such as managed those blessed children's excursions last summer, through the agency of the *New York Times*, will enlarge their plans, and include adults as well as children, and charter railway trains as well as steamboats. This thing is done systematically in the Old Country, to the great delight of thousands, and here is an account of it:

On Mr. Cook's first visit to America, in 1866, we published the accompanying por-

trait, with a sketch of character, in the *PHRENOLOGICAL JOURNAL* of that year. Since that time, the excursion enterprise has grown to immense proportions, as will be seen herein.

THE PRINCE OF TOURS.

This title appears to us to be no exaggeration as applied to Mr. Thomas Cook, the originator of that remarkable and advancing system of travel—the *Excursion*, and the present head, as he was the founder—of the widely-known house of Cook & Son, in London. The extension of the business of that house to our own country, and the opening in this city, at 261 Broadway, of an office under the direction of an American partner—Mr. E. M. Jenkins—gives special interest to its operations, and justifies this somewhat elaborate notice of them.

The work of Mr. Thomas Cook, in connection with excursions, covers a period of about thirty-four years. In its wonderful growth it is a curious illustration of the old couplet—

“Great oaks from little acorns grow;
Great streams from little fountains flow!”

The germ of the Cook-tourist system, which to-day enmeshes the world with its threads of enterprise, was indeed exceedingly small. Mr. Cook was by trade a cabinet-maker, and from the benevolent impulse of his heart to do good to his fellow-men, was also a bible-reader and a temperance lecturer. While he was traveling on one occasion to a temperance meeting, the movement of a railway train arrested his attention. He thought of the railway as a temperance instrumentality, conceiving at once the plan of cheap conveyance to centers of workingmen. The first proposition he made to the railway managers was accepted, and, although it covered only a distance of a dozen miles, for perhaps five hundred men, it was the tap-root of the world-embracing enterprise over which he presides to-day.

To trace the progress of his movement step by step is not a part of the plan of this sketch. Suffice it to say, in the way of history, that for some years his scheme had no broader scope than local excursions in the interest of the lower orders and the cause of temperance. For some years, indeed, he did everything of this sort without any pecuniary benefit to himself. At length his success,

his growing facility, the favor he met with from good and wise men, led him to conclude that his “calling” was to be “a leader of the people”—in the way of broader and wider excursions than he had before thought of. His operations for half a score of years were confined to the territory of Great Britain, to the limits of which, however, and in almost every direction, he gradually pushed his adventures, subsidizing all railway, steamboat, and coach lines, by his tact and energy and integrity combined.

At the Exposition in Paris, in 1867, he was already on the march to his conquest of the world as a field for his ventures, and since that time there is scarcely a route of travel, however unique and difficult to the ordinary tourist, to which he has not given facilities and lent attractions by his admirable system.

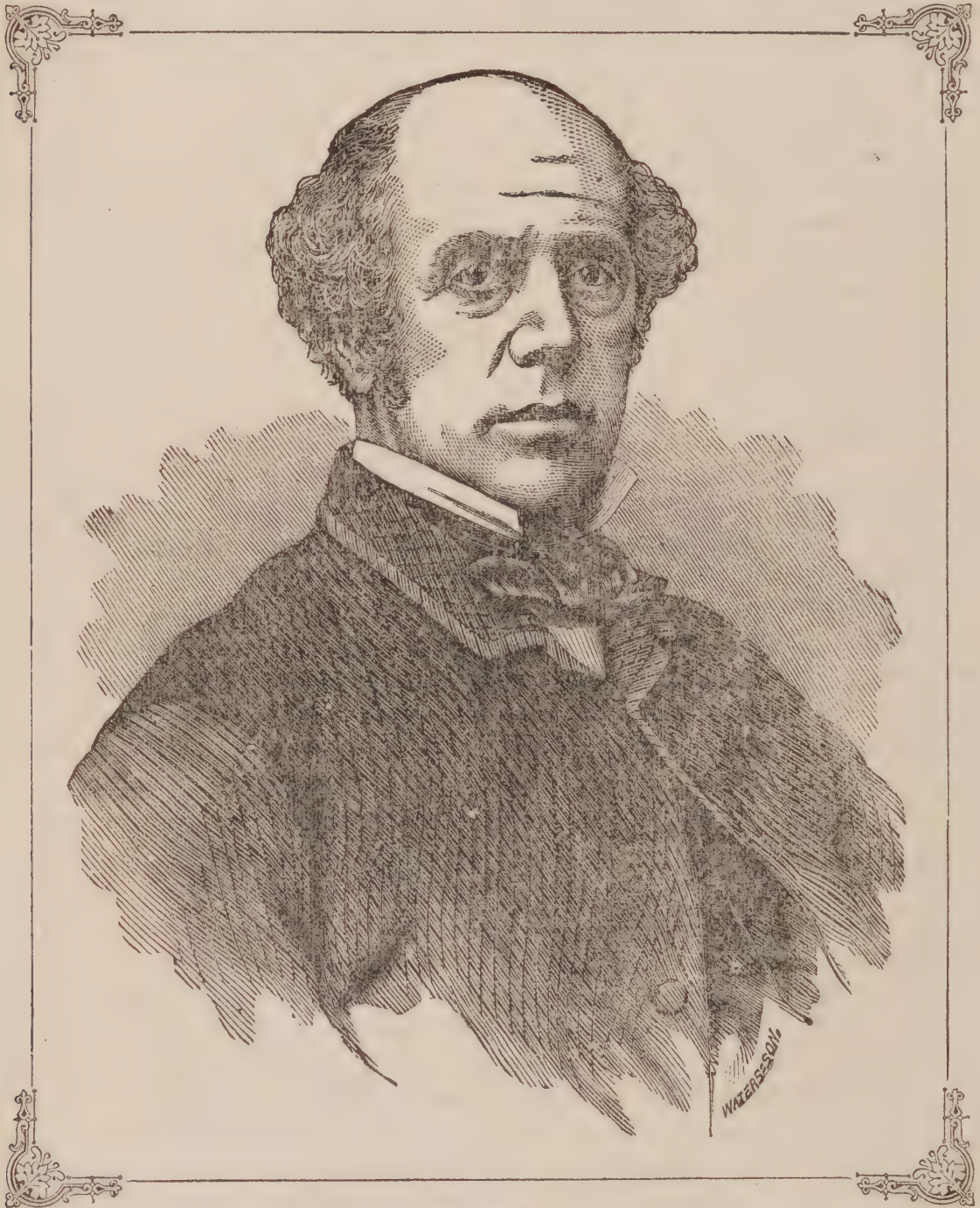
For some years past the co-operation of Mr. John Cook has greatly facilitated the work his father began. Father and son, and, at need, a number of experienced men, have conducted parties of tourists over England, Scotland, Ireland, and Wales; and beyond these narrow limits over all parts of the Continent, until finally the tour around the world has been safely and happily accomplished.

To give any particular account of the work done for years past would require a volume. The original offices in London were continually growing less and less adequate to their purpose, and in 1872 they secured the ground opposite to their old office, at the corner of Fleet and Farringdon streets, and fronting thus on Ludgate Circus one of the most conspicuous centers of London, and full in the face of the great Cathedral, up the slight acclivity of Ludgate Hill. There the handsome building, of which a picture accompanies this sketch, has been erected. It is of light stone, six stories in height, and affording ample accommodations for the work of the office, and for the comfort and convenience of tourists having relations to the house. This latter feature is a very admirable and important one, and will be duly appreciated by Americans in London.

The relations of the house in England and of Cook, Son & Jenkins in this country to travelers, in small or large parties, are of a friendly as well as of a business nature. So

far as this is possible, they take the comfort and satisfaction of their patrons to heart. In regard to Mr. Thomas Cook, it is safe to say that he attaches his fellow-tourists to himself by his kindness of heart, his painstaking solicitude for every one's happiness, his conscientiousness in all his transactions with and for them. Of this the writer had the

At the bidding, as it were, of this Prince of Tours, railway officials, steamboat officers, landlords of hotels—"Grand" and "Royal" in name—and "all and singular," those with whom the tourist has to do, doffed their habitual surliness of manner and donned the pleasantest courtesy. It is simply true that in all that Hebridean tour, its natural de-



MR. THOMAS COOK.

happiest experience, combined with large observation, during a tour in 1872, in the west of Scotland, where he is quite convinced that had he been then and there a "lone traveler," he must have suffered annoyances from which Mr. Cook's vigilance and forethought effectually saved the whole party.

lights were heightened by the accessories of care and kindness lavished on the company by Captain Cook—I beg pardon, I should rather have said Prince Cook.

Mr. Cook has achieved a great success. He has conquered it, for a thousand obstacles have arisen and menaced his plans with defeat. His vast range of routes has been

built up by difficult steps. He could never have accomplished what is now done without the absolute confidence and respect of the magnates of the world's great routes. He cheapens fares; he opens new journeys; brings the hotel expenses to a minimum; he provides, in his attendants, guides and couriers at need, and 'bus companies are either personally conducted, or escorted by those whom he has trained and inspired for these

out last summer, and brought back such flattering reports of enjoyment and profit.

This, however, is but a small part of the work on hand. It has made already extensive arrangements with the great railway and steamboat routes of the Western world, adopting the familiar motto—

“No pent-up Utica contracts our powers,
But the whole boundless continent is ours!”

Excursions will be started to the Rocky



COOK'S EXCURSIONIST'S BUILDING, LONDON.

services; thus excursionists are not only forewarned, but forearmed against the common and avoidable annoyances that beset the tourist in strange lands, and beyond this, have a well-arranged and economical plan of travel not only projected, but prosecuted to completeness. The New York office is now making up extensive parties of tourists, one of which is to consist specially of teachers—like the great educational party which went

Mountains, and to the Golden Gate, perhaps this season. Certainly to the St. Lawrence, and to the wild scenery of the Canadian Saginaw. The time has come when companies of ten or twenty can have a novel route arranged for them, with every detail of care and cost fixed beforehand. This is a matter of congratulation to our people, and of great credit to the managers of this enterprise. For list of guide-books see advertisements.

HOME DEPARTMENT.

HOW TO GOVERN AND TRAIN CHILDREN—No. 2.

CHILDREN of different dispositions are found in the same family. One child, taking after the father, will be brave, curt, plucky, positive, proud, persevering, and rash. Another child, resembling the mother, will be meek, timid, sensitive, submissive, magnanimous, and sympathetical. Another child may resemble the parents in about equal degree, and will be a happy modification of the two—will be less brave than the father and less timid than the mother; and we can imagine a combination often seen in the same family, one child resembling largely the father and in a medium degree the mother, and another resembling largely the mother and but moderately the father. Thus there may be five children in one family, no two of whom would be so nearly alike that the same treatment would produce similar results in each.

The child with the meek and timid, tender and sensitive nature, would be found with a broad head outward from the crown on each side, in the region of Caution, and well developed in the middle of the top-head, in the region of Veneration. At the crown of the head, also, there would be flatness where Self-Esteem, if large, would round it out. The head would also be narrow in the region of the ears, where Combativeness and Destructiveness are located.

A glance at such a head teaches at once that the child is to be tenderly and considerately treated; is not to be harshly or rashly spoken to; that subjects involving discipline or reproof should be carefully and quietly suggested rather than peremptorily and recklessly urged in a mandatory spirit.

We have seen children of that stamp boisterously addressed in school or by inconsiderate parents or nurses, when the little thing would tremble, turn first red and then pale, and become so flustered in mind as not to know the truth or how to utter it if it was remembered, and the culprit would stammer and contradict himself, and therefore be charged with all manner of duplicity and depravity. On the contrary, a gentle sugges-

tion to such a child would have been all-sufficient to restore it to rectitude of conduct and to awaken its lasting confidence and love toward its teacher or parent.

Such children need encouragement; should never be talked to about real or imaginary dangers. People may be wiser to-day than they were forty years ago relative to frightening little ones in respect to the dark, witches, and malign agencies, but we now occasionally hear such talk even in intelligent and respectable families.

When a little child five years old, trembling and fearful, asks if something naughty will come and carry it off if it does this or that, it does not need an argument to prove that some injudicious mother or nurse has been playing upon the child's strongest faculties, namely, those of Fear, Veneration, Spirituality, and Imagination.

Such talk is never uttered to one of the bullet-shaped, conical heads. Many a boy has Combativeness and Destructiveness enough, and such a deficiency of Cautiousness and Spirituality, that he would draw back and brandish his little fists, and say he would like to see some terrible thing coming after him; he would fill his pockets with stones and pelt him. Such a boy would more likely be promised a ride, or a chance to harness a goat, or climb trees for cherries or nuts, or go fishing, or some heroic sport, or some gratification of his appetite at the candy store or elsewhere.

This kind of treatment, namely, frightening the fearful, and domineering over the meek, and being rude toward the sensitive, and mandatory toward those who are naturally submissive, tends to make the matter worse, to strengthen and excite those elements of submission and timidity which are already too strong; and in the case of the bullet-headed boy it would encourage his Alimentiveness, Combativeness, and Destructiveness, and those organs which give dash and desperation. The treatment makes him more rude, rough, severe, and adds to his already excessive developments of force and appetite.

The timid child ought to be addressed through the elements of courage. The story of the child that was afraid to have the bed-room door closed which opened into the sitting-room, where, when in his bed, he could look and see his mother until sleep had closed his eyes, will illustrate our point. He was afraid of the rats that he heard running in the walls and ceilings, but was really as much afraid of the dark. The father, resolved to break him of his fear and folly, cut a long stick and gave it to the boy when he went to bed, telling him to strike with it on the wall when he heard the rats and he would find that the rats were afraid of him. This was a direct appeal to the boy's Combativeness and Destructiveness, which, being excited, had a tendency to modify the action of his Caution and Imagination. He was willing to have the door nearly closed, thinking the rats would start to run all the quicker. He soon heard them running in the wall, and with a few sharp blows with his stick the noise of the rats was silenced. He found himself the victor. It awakened his intellect as well as his force of character, and he was regarding it, also, as something funny. He then insisted on having the door shut entirely, and while he was waiting for another chance to win a victory over the running rats he fell asleep, holding on to the stick with both hands. After this he was anxious to have night come so that he could retire, have the bed-room door shut, and arm himself for another campaign.

Probably no suffering is more depressing or severe than that which originates in fear, especially when heightened by strong Spirituality and Veneration, which awaken an idea of unknown forces and spiritual agencies.

Persons who are skeptical; who know no power greater than that of human or animal muscle, or of the common mechanical agencies, may be talked with about unseen agencies, and they will be very little affected by them. Persons whose religious feeling has its chief roots in conscience and reason, will not be very likely to be carried away by emotions that must come through the spiritual and the imaginative qualities; and the same is true of children.

No mother should surrender her children to the training and discipline of incompetent,

ignorant, and superstitious nurses and servants, who will fill their minds with all manner of vague and groundless fears and terrors, simply that they may hush the children into submission or frighten them into obedience. Children have been frightened into fits and into idiocy. Tens of thousands of them are frightened into a vague, superstitious fear, which haunts their pathway through life.

Most of us have heard stories of ghosts of the departed being seen walking in the graveyard. A brave man, who returned to the graveyard where a frightened friend assured him he had seen a ghost dressed in white, found only an old white horse feeding among the tombstones. And these stories of ghosts and graveyards have made nearly everybody feel lonesome in the night while passing a cemetery. We fancy that few people would be willing to walk alone through a cemetery at night, and the tales of the nursery must be chargeable with most of that groundless fear.

If mothers would look at the form of their children's heads in the light of Phrenology, they would know what child needs encouragement and what one may safely be warned of danger, and how to train and manage the little folks so that they may come up to manhood harmoniously organized, with appropriate ideas of life and duty. If mothers would study Phrenology and Physiology more with reference to the management and healthful feeding of their children, and fashion plates less, their children and the world would be thereby greatly benefited. Most children, by being trained in accordance with their organization, may be led in the path of morality and prosperity; and there are few who may not, by improper diet and training, become a shame to their friends and a curse to the world.

A CONFESSIO.—Whatever is good in me seems to have been done by the early teachings of my mother, and the advice is, co-operation and encouragement of my wife; and it appears to me to be a truism needing no argument, that the more we can do for those who are to be wives and mothers the larger will be the contribution to the welfare of society, and besides we can make no mistake in laboring for

the elevation of woman in the social scale. We can do nothing for her that is not at once made tributary to the comfort, happiness, and virtue of men. As I once heard Dr. Chapin say, "together they lost paradise, and together they must regain it."—*Peter Cooper.*

SHALL WE WHIP?

IF the reader sincerely believes that whipping will do *him* good when peevish, fretful, or tired, then he may justify himself in administering to others that which he himself would take under similar circumstances. But we believe there are better ways of being subdued and of subduing. We believe in the doctrine of "overcoming evil with good." "Better suffer wrong than do wrong." Not long ago strait-jackets were used in all our lunatic asylums. Now they are nowhere used. Not long ago flogging was practiced in our schools, in the navy, and in many families. Boys and girls alike were whipped, greatly to their moral degradation—as we believe—and never to their moral improvement. Ignorant or brutal teachers, keepers, and parents who know no better, may be heard to say, "We can not get along without whipping." So of low, ignorant, and brutal drivers of horses. But intelligent and humane teachers, keepers, and parents manage to get along better without whips than others do with them. It all depends on knowing how. One resorts to *diversion* in overcoming a belligerent child; another tries amusement; another "breaks down all opposition" by kindness. It would be strange that a teacher or a parent could not out-general a child and conquer him, without resorting to *violence*. Here is a little poem, from *Hearth and Home*, which shows how the thing was done in one case. We copy and commend it for the valuable lesson it contains.

BOO! HOO!

On the morn he was four years old, it is said,
Master Bob Tempest sat up in bed,
With a night-cap on his flaxen-haired head,
Woven of cotton, both white and red.

Boo! hoo!

This little object of interest
Stoutly declared he would not be dressed,
Though his mother fondly coaxed and caressed,
And his father's tone command expressed.

Boo! hoo!

The more to put on his clothes they tried,
The more he moaned and sobbed and sighed,
And screamed and bellowed and yelled and cried
And flounced and pinched and scratched beside.

Boo! hoo!

So long and loud he screamed and cried
That at last his parents were terrified,
And sent for the famous Dr. McBride,
Who was known through the city far and wide.

Boo! hoo!

The doctor came; looked exceedingly wise
Through the gold-rimmed spectacles over his eyes,
Then said with a smile of mild surprise,
"A remarkable voice for a child of his size!"

Boo! hoo!

"My dear Mr. Tempest, I can not deny it,
He'll be much worse, if not kept very quiet
For a month or more on a simple diet
Of bread and water—I beg you to try it."

Boo! hoo!

"Unless"—and on the boy he bent
A look extremely benevolent—
"He should get well now. In that event
There's no more to be done," and out he went.

Boo! hoo!

The youthful Tempest his yells suppressed,
And softly remarked he would be dressed;
With meekness his naughty ways confessed,
And ever afterward did his best.

Boo! hoo!

One cause of belligerency and ill-temper in children comes of what they eat, and cooling food, like bread and water, will tend to subdue passion, and bring a little four years' old torpedo to his senses. Feeding children fat meat, rich gravies, sugars, spices, etc., is like feeding a young dog on raw beef, which lessens his docility and increases his Destructiveness. If children be properly fed they may be more easily governed, and the whip may be dispensed with only bread and water.

HOW IS THIS?

THE *Home Methodist*, of Philadelphia, publishes an article in which the following sentiments are given. We append remarks in brackets.

"Little children are without disguise. [1.] As soon as they learn dissimulation, their childlike nature is gone; the very bloom and beauty of childhood has vanished forever. [2.] And it is the same with the sanctified believer. He who is completely saved has the mind of Christ. He is 'an Israelite indeed, in whom there is no guile.' [3.] He is free from all affectation and constraint; his actions, words, and manners are all natural." [4.]

[1. Is this orthodox? Are not *all* children conceived in sin? Can children be born without sin? 2. Forever! May they not repent? And if they repent and are "born again," will not their bloom and beauty return? 3. We know some Israelites in whom there is something like guile. 4. But is not his "nature" to be crucified, and somehow crushed out of him?]

"Little children are conscious of their weakness, and distrustful of themselves, and dependent on others." [5.]

[5. That depends on how much Self-Esteem they have.]

"Little children are also remarkable for a forgiving disposition. They do not long re-

tain their anger; their quarrels are soon made up; their resentments are soon gone." [6.]

[6. It may be so with some, not all. There are children who hold fire to a dangerous degree. Some children are very far from being "children of light."]

"A loving spirit is in like manner characteristic of young children. The love of a child is very pure and natural. It is easy for it to love. And so the childlike soul finds it natural and easy to love." [7.]

[7. This depends much upon the character of its parents. *Some* children are as hateful as are their wolfish, thievish, drunken progenitors. "You can not make a silk purse out of a sow's ear." Blood in children, no less than in horses, tells.]

Department of Physiology—Our Sanitarium.

Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

CREMATION vs. INHUMATION.

HEALTH teachers can not disregard those very prevalent sources of pestilence, graveyards and cemeteries; and now that the subject is being extensively agitated in this country and in Europe, there seems to be the proper occasion for us to reiterate what we have been teaching for a quarter of a century. But let us go to the basis principle of this discussion at once. Where is it? What is it?

If it is proper to place some dead bodies in cemeteries in such circumstances as to render decomposition very slow or retard it as long as possible, it is proper, nay a duty, to treat all dead bodies in the same manner. Is the dead body of prince or king more important than that of pauper or beggar? Are the mortal remains and perishable elements of *my* friends and relatives more sacred than those of *yours*? If God is no respecter of persons, living or dead, what right has man to be of the dead?

To preserve all dead bodies from returning to dust is simply impossible without rendering the earth uninhabitable. If all the bodies that have been buried in the ground since the creation had been preserved from decompo-

sition, the whole earth would long since have been a graveyard. Whatever we may say or do about it, the majority of dead bodies must and do soon become resolved into their original elements. We can only prevent this result and thwart the operation of the laws of nature in relation to comparatively a few corpses at most. Why should we try to do so with those few?

And since the law and order of nature require all dead bodies to be resolved into their primary elements, why should not this be done rapidly with fire or chemicals, and in a manner that will not offend the senses, pollute the earth, nor destroy the living? Bible, nature, reason, health, are all in favor of cremation. There is nothing but prejudice, superstition, and custom in favor of inhumation.

All physicians know that rotting and decaying animal matter of all kinds, wherever accumulated, fills the air with the seeds of pestilence, and infects the wells and streams in the vicinity with the germs of the most malignant diseases. The worst forms of typhoid fevers, small-pox, measles, plague, and cholera are often traceable to these sources.

Wells and springs near the dwelling-houses of country farmers are frequently contaminated by the drainage from privies, stables, barnyards, and hog-pens in the immediate vicinity.

Some years ago nearly one hundred students in a high school in Pittsfield, Mass., sickened of a very malignant form of typhoid fever. About thirty deaths occurred. The physicians of the place could not account for so fatal an endemic in so salubrious a locality. A subsequent investigation disclosed the fact that the obstruction of the sewer which conveyed the excreta from the building was the sole cause of the mortality.

Graveyards are always located in the most objectionable places. They are placed on

elevated ground so that the wells, springs and streams for a great distance may be poisoned by them. In very sparsely populated districts the danger would be comparatively slight; but as population becomes more dense the evil must increase correspondingly. In the great cities the evil has already attained immense magnitude. As the cities enlarge, the cemeteries extend and multiply around them. New York now buries some thirty thousand bodies annually, and London nearly one hundred thousand. Hence more and more of the best locations for the residences of the living are converted into "cities of the dead," with continually increasing expense and ever-aggravating causes of pestilence.

R. T. TRALL, M.D.

TRUE THEORY OF BRAIN DEVELOPMENT.

VALUE OF THE FACIAL ANGLE.

EVERY one whose thoughts are turned toward the study of mind, eagerly seeks some method of estimating mental capacity. It is not strange, therefore, that any system of measurement which promises to give a rule for determining the grade of intelligence or the relative rank of intellect in men and animals should awaken interest and invite investigation.

Prior to the publication of the discoveries of Drs. Gall and Spurzheim, men studied faces, measured the angles of the face, and the proportion existing between the weight of the brain and body; but nothing which would serve as a rule and stand the test of criticism was found.

In the latter part of the last century, just before Dr. Gall promulgated his discoveries, on which for many years he had been engaged in study and observation, Prof. Camper, of Berlin, proposed a new method of measuring the skull, which soon attained great popularity. He claimed that the basis of comparison between nations may be found in the angle formed by a line passing from the opening of the ear to the base of the nose, and another line drawn from the most advanced part of the upper jaw-bone to the forehead above the root of the nose. The annexed two cuts will illustrate the point.

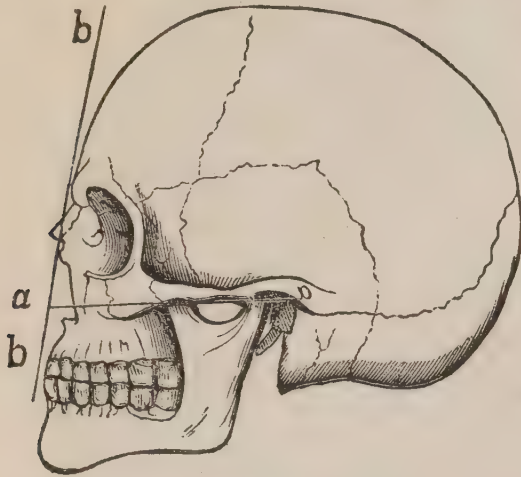
It will readily be seen that if more brain were developed in the forehead of the Indian it would elevate the line in front of the face and give a much better angle. It is not that the face is larger, but that the forehead is shorter, that makes the difference in the facial angle in this case.

This method of measuring the facial angle is also, sometimes, applied to animals, but it does not in all cases illustrate the degree of intelligence, because those animals which feed on herbage and need a large mill to grind it, would be found with a very long face in proportion to the size of the brain; while the short, stout head of the meat-eating bull-dog would show a much better facial angle than the horse or the elephant.

Camper informs us that one species of the ape tribe has a facial angle of 42° , in another animal of the same family most approximating in figure to man, the facial angle contains 50° , while among the lower types of the human race the angle is 70° , and in the higher types of mankind the angle is 80° . In some works of ancient statuary, as in the head of Apollo, the angle is 100° .

It will be readily understood that the facial angle, as measured and estimated by Camper, is merely a measure of the relative projection of the forehead and of the upper

jaw, and does not measure the capacity of the cranium nor the size of the brain. If the jaw be long it will diminish the angle. A prominence of the lower part of the forehead will increase the angle, though the head be neither high nor broad. The angle may differ



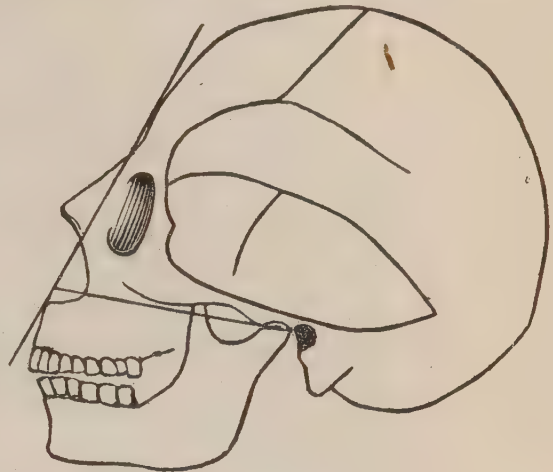
CAUCASIAN.

greatly between persons of the same size of brain and similar mental capacity.

Civilization seems to lessen the size of the jaws, but we think it is more apparent than real. If the jaws of the uncivilized were no larger than those of the cultivated, the relative smallness of their foreheads would make the face and jaws seem larger. It is probable that savages and barbarians use their teeth more than civilized people do, in masticating their crude, uncooked food, and that this extra use of the jaws develops them to a larger size—but faces of the same size look larger when the forehead is small than when it is large. We often read of the prognathous or protruding jaws of the lower races of men, when it would be quite as accurate to speak of their small, short, and retreating foreheads, which by contrast make the faces seem large and protruding.

In the lower classes of men, both in civilized and savage countries, the middle lobes of the brain, in which are located the animal propensities, are larger than in the better developed of mankind. This tends to depress the opening of the ear, thereby enlarging the facial angle by carrying down the outer end of the lower arm of the angle. If the reader will look at the engraving of the Caucasian skull, he will see that the opening of the ear is higher up at the end of the line at *b*, than is the front end of the line at *a*. A glance at the engraving of the Indian skull will show that the opening of the ear is so low that the

base line rises as it approaches the perpendicular line at the base of the nose. This fact makes the facial angle of the Indian much better than it would be if the ear was as high up as that of the Caucasian. But if the anterior lobes of the Indian brain were



INDIAN.

as large as those of the Caucasian, the whole face would be pushed down so that the base line of the angle would be lowest at the forward end, thereby reducing his facial angle, though the intellectual powers were thereby much increased. Camper's facial angle is thus seen to be defective. The mere size of the angle formed by the two lines is quite unreliable.

The savage needs, and must have, as large a face as the man of culture to subserve the processes of eating, smelling, and seeing. We can readily understand how the Indian and other wild races should have large and strong jaws, feeding as they do on roots, nuts, parched corn, dried fish, and dried jerked beef, which is about as hard and tough as raw hide. Such exercise tends to make the teeth large and strong, and also to enlarge and strengthen the bones and muscles of the face and jaws; but as these classes lack intellectual culture, their foreheads are relatively small.

More attention has been paid by naturalists to the contrast between the forehead and face than to the actual measurement of either; and some scientists talk fluently and, as some people think, learnedly of facial angles and of the form of the jaws and teeth, while they studiously neglect to estimate the length and size of the anterior lobes of the brain—apparently, lest they should lend, or seem to lend, the dignity of their great names to the support of Phrenology. They seem

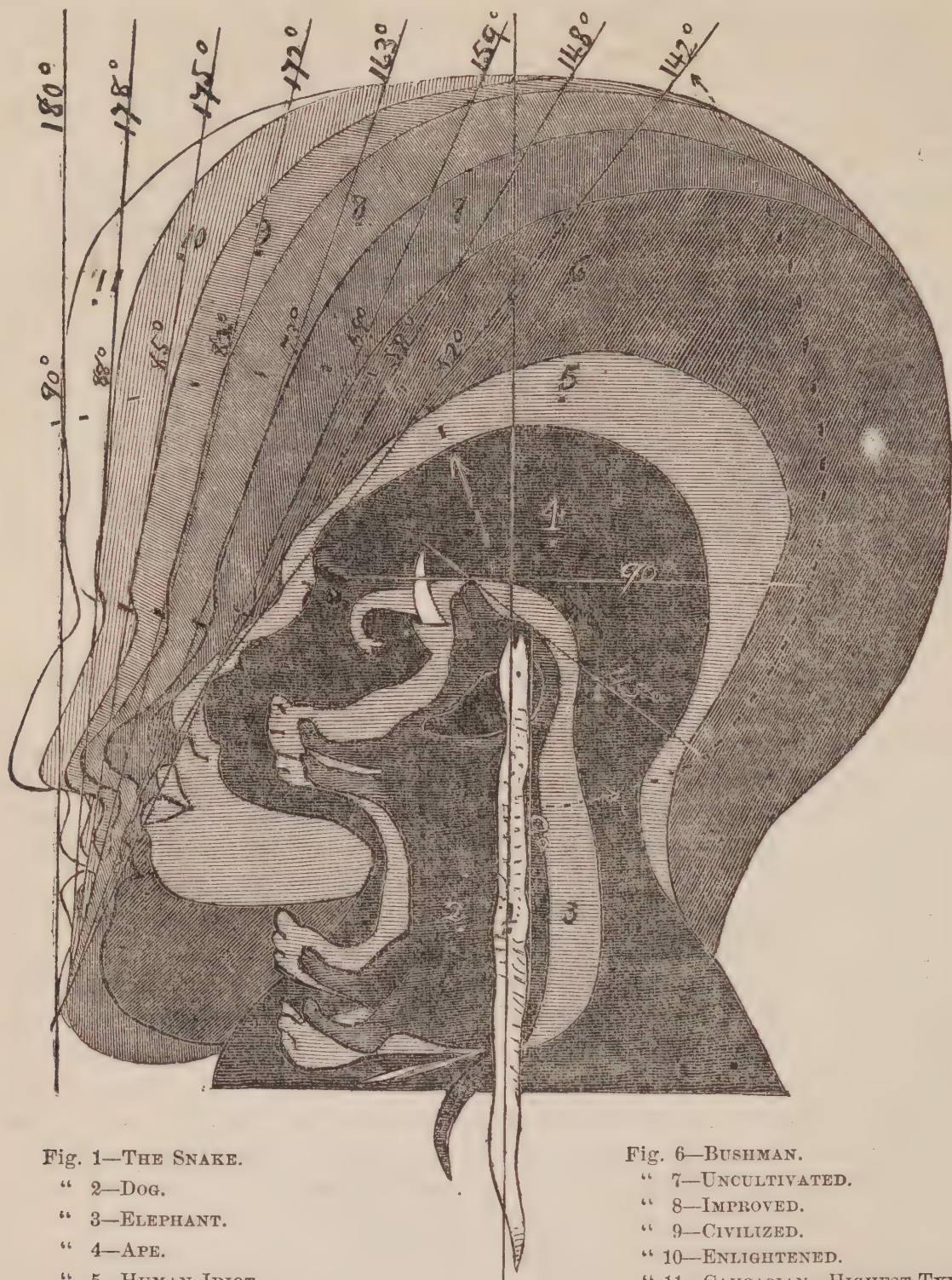


Fig. 1—THE SNAKE.

" 2—DOG.

" 3—ELEPHANT.

" 4—APE.

" 5—HUMAN IDIOT.

Fig. 6—BUSHMAN.

" 7—UNCULTIVATED.

" 8—IMPROVED.

" 9—CIVILIZED.

" 10—ENLIGHTENED.

" 11—CAUCASIAN—HIGHEST TYPE.

FACIAL ANGLE AND BRAIN DEVELOPMENT.

to examine and measure everything but the brain, lest they should be supposed to regard the size and form of the brain as an index of talent and character, and thereby indorse Phrenology.

We now propose to present a new method of measuring the facial angle, with an explanation which lies at the foundation of all the significance and value there possibly can be in the facial angle

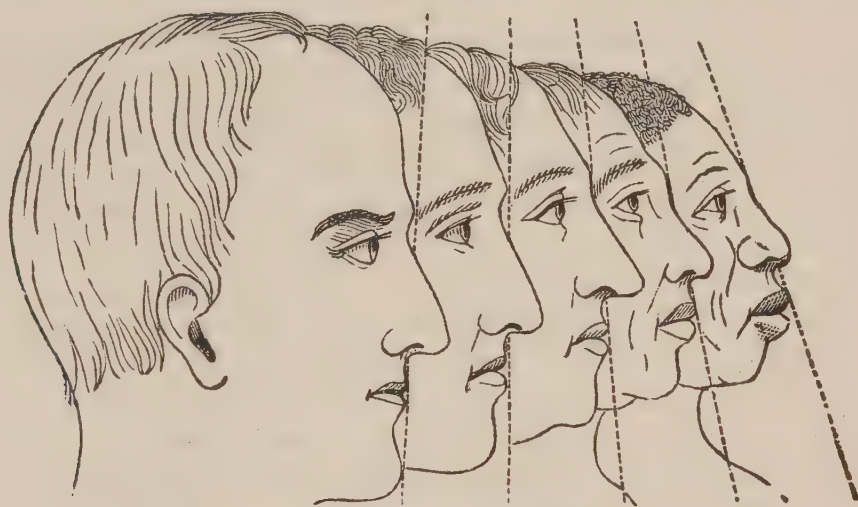
About seventeen years ago (we think it was in 1857), on the occasion of the first exhibition of Du Chaillu's collection of gorilla

crania to a large company of thinkers and men of science, invited by Cyrus W. Field, for that purpose, to his house in New York, S. R. Wells and the writer, representing Phrenological science, were among those invited. I was requested to explain to the company the rank occupied by the gorilla in the scale of being, as indicated by his cranial development. This request was made quite unexpectedly to me after the company was assembled, as I was expecting, like the rest, to hear from the great gorilla hunter himself. We hastily sent to the Phrenological collec-

tion for specimens of skulls, ranging all the way from the snake and turtle to the highest type of humanity. On that occasion, and with such means of illustration, I elucidated the fact—the first time, as I believe, it had been done in that manner—that the face of the snake, turtle, and fish, is on a line with the spine; that as the brain is increased in size at the spinal axis, and an animal is thus raised in the scale of intelligence and mentality, the face is necessarily pushed by the brain forward and downward out of line with the spine, and the face is thus made to form an angle with it. We introduce an engraving to illustrate the subject, containing eleven figures ranging from the snake to the highest form of human development.

and on a line with the spine, it has performed half of a complete revolution and is now directly opposite of the back and parallel with the spine; the body is erect, the spine and face being perpendicular, the face having been carried around through 180° solely by the development of the brain at the top of the spinal column. It may now be seen that all the value of any facial angle is explained by this mode of development, and the facial angle thus becomes relatively valuable as an index of the rank of the animal or the man.

Since the first promulgation of this idea in 1857, to the present time, every year I have sketched this illustration on black boards, and explained it before public audiences and private classes, and have had sets of draw-



GRADES OF INTELLIGENCE.

The spine of the snake occupies the place of the spine of each of the other figures in the engraving. In the snake, fig. 1, the face forms no angle with the spine. In the dog, fig. 2, the brain pushes the face out of line with the spine about 45° . In the elephant, fig. 3, the face is at right angles with the line of the spine and makes an angle of 90° with the spine. In the ape, fig. 4, the face is turned beyond a right angle with the spine, and lacks only about 38° of being parallel with the spine and on a line with the front of the body. It has departed from the snake quite 142° . The idiot, fig. 5, shows that the line of the face is raised to 148° . In the bushman, fig. 6, the brain being more enlarged, it pushes the face still farther toward the perpendicular, and finally running through several grades of human development, figs. 7, 8, 9, 10 to the highest, fig. 11, the face, instead of being on the back, as in the snake,

ings made for use in our public lectures and for our students to use in the lecturing field.

For several years the editor of the PHRENOLOGICAL JOURNAL has published a list of faces and heads under the name of "Grades of Intelligence," in which the lowest type of human intelligence, and grades from that upward, are shown in a single drawing, one being lapped upon another, indicating the regular growth of the forehead.

In a recent number of the "Popular Science Monthly," in connection with a labored article by Dr. Dexter, a somewhat similar illustration appears under the title "Facial Angle." In his illustration, the fish, snake, crocodile, eagle, dog, baboon, and men appear. He recognizes only half the change which really takes place in the facial angle. Instead of keeping the spine of his fish and snake on the line of the spine of the dog and man, he projects it directly back from

the head of his man whose face is raised only at right angles with the spine of the snake, when it ought to be pushed away from the line of the spine, not 90° only, but 180° .

We are glad to see Dr. Dexter's illustration, but he does not complete it, nor work on the basis of nature. He should have kept, as we do, the spines of all his subjects on the same line and the opening of the ear also at the same point, and he would then have sent the face around where nature sends it, and thus have shown the full influence of the development of the brain in changing the facial angle, thus constituting the only sound basis of value to any estimate of facial angle.

We commend to our readers a careful study of our illustration. It shows that the snake, fig. 1, and his face, like that of fishes and of reptiles generally, is level with the line of the spinal column. We might introduce several other grades of animal development between the snake, fig. 1, and the dog, fig. 2, but they would make a single picture too much complicated, and would confuse the observer. Between the Bushman, fig. 6 and the highest type of the Caucasian, fig. 11, there are really very many grades of development, far too numerous to be represented. From the snake to the top of the scale, the opening of the ear is represented in the same place, and all the change in the portraits, shapes of head, and position of the face, are due to the growth or development of brain from that common center at the top of the spinal cord, called *Medulla Oblongata*. Thus the scale of development is complete from the reptile to man.

NELSON SIZER.

TOBACCO AND ROBBERY — A NEW MODE.

THE DANGERS OF MISCELLANEOUS SMOKING.
—The Paris *Figaro* gives the following details of an extraordinary robbery of jewelry:

"A Parisian commission merchant, M. Cahn, had purchased a quantity of jewelry in Paris for London houses to the value of £6,000, or say \$30,000. On the evening of his departure for London he dined with a number of his clerks, who accompanied him to the station, where he got into an empty compartment of the train which was to take him to Calais. Some minutes later four persons entered the carriage, and, although he would have pre-

ferred to be alone, finding there was no time to change, he engaged in conversation with them, at the same time keeping his hand on the traveling bag which contained his valuables. On arriving at Calais the strangers disappeared. M. Cahn proceeded on board the boat to cross the channel. He was immediately joined by a person whom he recognized as one of his fellow-travelers in the railway train, and who, after a short discussion on the evils of sea-sickness, offered him a cigar, which he declined. His interlocutor, however, was very pressing, and tendered a case of what he called real Havanas, which M. Cahn believes now, although he did not specially notice at the time, was not the same as the stranger himself was smoking. In the end M. Cahn took a cigar, and lighted and commenced smoking it, when he at once became insensible. On recovering he found he was at Dover, and that his traveling bag and impromptu acquaintance had disappeared. Three railway trains were about to start for London. A search was made for both bag and stranger, and the telegraph was put into play, but without success."

[In some countries it is customary for an entertainer himself to drink before offering a glass to another, to assure the entertained that the liquid had not been poisoned. Rogues resort to many tricks to secure their ends. They hand fellow-passengers sugar candies, which *may* be drugged, and so put a victim in their power. As a rule, it is better to decline all such favors from total strangers. Would it not be better to abstain entirely from tobacco? It can do no good; it *may* do harm.]

MOUNTAIN-MAKING, OR GEOLOGICAL PERIODS.—Prof. J. D. Dana, in speaking of the slow process of mountain-making, estimates that the interval between the beginning of the primordial and the metamorphism in the Green Mountains was at least 10,000,000 years; that the next epoch of great disturbance was at the close of the carboniferous era, in which the Alleghanies were folded up, while the Appalachians were at least 35,000,000 years in making. The displacements of the Connecticut River sandstone, and the accompanying igneous ejections, which occurred before the cretaceous era, took place some 7,000,000 years after the Appalachian revolution. The earth's contraction required an exceedingly long era in order to accumulate force sufficient to produce a general yielding and pliation or displacement of the beds, and to start a new range of prominent elevations over the earth's crust.

[Ten millions of years! That was some time ago. But where will the PHRENOLOGICAL JOURNAL be in 10,000,000 of years from now? Who will edit it and read it then?]



NEW YORK,
JULY, 1874.

THE HALF-WAY HOUSE.

HERE we are, dear reader, at the half-way station, on the route through the year—JANUARY to JULY. A few of our passengers—subscribers—alight here, while others, the great majority, are ticketed through from January to December. We are happy to accommodate such as prefer even a six months' trip. To this end we have two volumes a year, one beginning with January and the other with July. This is a suitable time to re-subscribe as well as to form clubs. We shall welcome all efforts in this direction, for we desire to reach all who would be benefited by reading the PHRENOLOGICAL JOURNAL.

DOMESTIC INCOMPATIBILITY.

"Be ye not unequally yoked."

IT is pitiable to witness the incongruous matches which inexperienced youth contract, and thus make their lives miserable. We meet ill-assorted matches, or their results, here and there; but especially in the divorce courts, the lunatic asylums, prisons, and poor-houses. Wreck and ruin completes the career of many who, had they been suitably mated, would have made life a success. Bright school-girls elope with stablemen; daughters of wealthy merchants fall in love with drunken "bold soldier boys," and our suburban gentry are "amazed" when they find their darling, Miss Highty Tightly, has run away with their gardener.

Then we find a grand young woman, it may be, moved by pity—it could not have been by admiration, or by love—consorting with an insignificant little fellow, whom she finally marries, to her life-long mortification, because she could not, or did not, follow her good judgment, and say NO, when she ought. So, too, we find splendid young men mated to McFlinsies, to artificials, to phantoms, or to show-cases. There is no woman there, and so the blind bats are "sold."

Did the evil end with the mismatch it

would not be so bad. But relations and friends are mortified, and somebody must provide for the impulsive, heedless, imprudent creatures. They fetch up, many of them, among our paupers, and must, henceforth, be provided for at the public expense.

"MAY COUSINS MARRY?" This question is so often asked that we have but one answer—yes, if past forty years of age; otherwise, no. Seeing the evils of such marriages, which result so often in producing idiocy or imbecility, blindness, deafness, or some other infirmity in children, several of our States have made it *unlawful* for cousins to marry. The authorities have done this in self-protection, and to save themselves from being compelled to support, by charity, those miseries who would be inflicted upon them through such indiscretion.

While we recognize and respect the feeling of personal choice, and even that almost blind emotion of "love at first sight," we are satisfied that the good judgment of considerate parents, based on knowledge and experience, would make fewer mistakes in choosing companions for their sons and daughters, than are now made by young people, who "fall in love" in ball-rooms, or at theaters, concerts, our railways, steamboats, etc.

Were it not for prudery, sensitiveness, and gossiping meddlers, these subjects might be considered, as it were, in "open court," and the best judgment of the best minds brought to bear thereon. For example, why should not the clergyman, physician, and even lawyer, as well as parents, be consulted on such questions? Better yet would be the opinion of one well versed in character reading, who can judge of compatibility by temperament and organization. But those who are ignorant are generally conceited, and think they know best. We may pray and preach, we may educate and train all we can, but there will be no millennium so long as foolish and ill-assorted men and women bring imbecile, idiotic, crazy, or criminal children into the world, to be supported by the industry of the few who were so fortunate as to be born of well-mated, temperate, and healthful parentage. Considerate parents will secure the respect of their children, who will abide their better judgment, in the momentous matrimonial question.

ONE CLERGYMAN CRITICISES ANOTHER.

THE *Christian Intelligencer* — Reformed Dutch—in reviewing Mr. Henry Ward Beecher's late volume of published sermons, says: The late Brooklyn Council and Mr. Beecher's relations to it will lend new interest to his future career in Plymouth pulpit. How far the practical independency of his church and the fiery ordeal to which he has been subjected will affect the tone of his preaching, remains to be seen. We have never heard or read Mr. Beecher's sermons without a deep feeling of the untold responsibility of the man who not only preaches always to such great throngs of people, but whose utterances are so carried by the press as by the winds to millions in the new world and in the old. His ideal of the pulpit certainly includes ranges of topics and methods of inculcation which are not recognized as legitimate by the evangelical clergy generally. [Mr. Beecher has introduced a knowledge of the HUMAN MIND into the pulpit, and this is what gives him such power over his hearers. He understands what he talks about.] We have always been disposed to regard Mr. Beecher's erratic propensities with large charity; and yet, while admiring his genius, we can not but grieve over the manifest injury which he so often inflicts upon the truth, the ministry, and the church, by his impetuous revolt against them all whenever they obstruct his theories and his moods. [Then let them take off the fetters that bind them. Mr. Beecher can not trot in a small sectarian measure. He has outgrown his swaddling-clothes.]

His recent course of Yale lectures indicate more power and breadth of theological discussion than he has usually been credited with, and his later sermons, some of which are in these volumes, attest the same fact. But that is not his forte. He is not a theologian in the highest sense of that word. But he knows how to bring all his resources to the elucidation of his views of isolated theological topics. [Is his critic a theologian in the highest sense of that word?]

His profuse and splendid power of illustration has lost nothing by the lapse of time. Past sixty years of age, he is just as brilliant as in his fiery youth; and with his massive physique and vigorous health (which decline

a six month's vacation offered by his people), he bids fair to retain his oratorical renown for years to come. If those years shall but make him a stronger and more faithful and able minister of the New Testament, his last days will be his best. ["More faithful!" We venture to inquire if Mr. Beecher has not faithfully discharged pretty nearly every duty which his tremendous responsibilities impose? Would to God all other clergymen in America had as good a record as he. But we need not champion Mr. Beecher. His works will follow him. There are mice, and there are men in this world, but comparisons are said to be odious.]

 TEMPERANCE—SELF-DENIAL.

There is only one certain and radical cure for intemperance, or any other evil, and that is the purification and elevation of the moral character of society. As the power of the merely animal appetites becomes diminished, and the moral tone increased, intemperance will decrease. As spiritual power increases men will get control of their appetites, the restraint will come from within, and they will need no pledges of total abstinence. In the mean time, let the men and the women do the best they can to mitigate and restrain the evil, and to remove temptation from all.—*New Jerusalem Messenger*.

AYE, aye, sir. But it will probably be some time before the human race attains the degree of "purification and elevation" necessary to self-control and moral excellence. There must be considerable bathing—inside and out—before the impurities of whiskey, tobacco, and vile drugs will be washed out. Are not the low, brutal classes, white, black, and red, as prolific as ever? Go into the slums of our cities, at home and abroad; go among the heathen everywhere; nay, go among our drunken legislators, and note their habits. Does the situation look much like the dawn of the millennium?

Besides, of all the children who, it is said, are born in sin, there are vast multitudes who remain through their miserable lives in childhood, so far as character is concerned, and, like children, must be kept in restraint and out of temptations. This temperance movement is not for the like of the editor of the *New Jerusalem Messenger*, or others who don't drink; it is for the benefit of those who do drink, and who are so weak that a pledge of total abstinence is their only safety.

He, however, can fulfill the spirit of such true Temperance as the following:

"Wherefore, if meat make my brother to offend, I will eat no flesh while the world standeth, lest I make my brother to offend."—1 Cor. viii. 18.

"That no man put a stumbling-block, or an occasion to fall in his brother's way. It is good neither to drink wine, nor anything whereby thy brother stumbleth, or is made weak."—Rom. xiv. 21.

THE RIGHT WAY THE BEST.

IN England it is considered necessary for those who wish to practice any trade, business, art, or profession, to serve a thorough apprenticeship in order to be qualified to go out into the world and offer their services or their skill in such a manner as to command respect and earn success. And this is right. No man of sense is willing to trust the shoeing of a horse or the construction of a harness or wagon to one who knows so little of his business that he might lame a valuable horse, or so construct a harness or wagon as to endanger the necks of the people who might use them. One serves as scullion before he assumes the station of cook, and the cabin-boy watches and assists the men, first learning by observation the facts of seamanship before his hands become sufficiently skilled to splice a rope, furl a sail, or stand at the wheel.

One has to give long service as "clerk" before he can offer his services as a salesman. In engineering, in architecture, in law, in medicine, or in theology, the same patient study, drill, and training are deemed necessary and rigidly required. The result is, those who have no adaptation to the pursuit which they propose to adopt are likely to find it out themselves, or be detected by their instructors, before mistakes damaging to the practitioner and fatal, it may be, to the patrons shall occur, and those who have talent will learn to excel.

In this new country of ours people jump into business without adequate preparation, and the result is crude service, frequent failures, and that half-way success which main strength, assurance, and egotism sometimes are able to win.

Grindstone work is not easy. It seems a waste of time, especially to the boy who turns it; but a sharp axe, with average strength, easily achieves success, while brawny arms and a dull axe vainly strive to bruise their way to rude achievement, which insults employers and gives parsimonious support to the worker.

That which is true of mechanism, medicine, or the ministry, is quite as true of Phrenology. The more thorough one's acquaintance is with the literature of the subject, the more he knows about the philosophy of mind and of the science which unfolds its laws, the better will he be fitted to explain them to others and apply their principles practically to the living subject. We have known men who never read three hundred pages on the subject, and confessed to us that they did not know even the location or definition of all the organs, to announce themselves as "Prof.," and offer to lecture upon and apply the science to patrons, promising as much as a man of ten years' experience could achieve. Of course only "the groundlings" would be pleased, but not instructed, and the sensible and well-informed would justly turn with disgust and contempt from such pretentious professors, while the noble subject itself was "wounded in the house of its friends."

A man of real merit and attainment in this field, or in any other, is not boisterous in professions. If he has fair talent and understands his subject he will win respect and confidence, as well as the other rewards of well-directed effort. Many people incline to suspect those who are profuse in promises and self-praise, and if such a person proves to be an ignoramus and a quack, he throws disgrace upon the subject and suspicion on all who may follow the path which he has defiled. We have known a worthy man to work two weeks in a town to erase the abuses which some worthless quack had left on the public judgment in respect to the science and its worthy advocates.

Men of good intentions, sound morals, and sound sense, with a fair education—the more the better—if well-informed by careful reading and considerable practice, can secure employment in the field of Phrenology, and win respect and success, while imparting to their

patrons information in regard to themselves, their children or wards, more valuable than anything else of equal cost or expense.

In this subject as in others, instruction thorough in theory and minute and critical in practice, is quite important. One may become an adept in medicine and surgery through study of books and by practice, but in a tenth of the time he could acquire in a medical college a proper passport to success. One who knows all about it can tell one in an hour more than by study he can learn in a week. Besides, there is a consolation in knowing one has been at the fountain-head for his information, and he is able to accept it without hesitation or doubt, as he can not his own unverified conclusions.

That which is true of medical students is equally true of those who would make Phrenology their vocation.

We are frequently written to asking what book or books will qualify one to become a successful lecturer and practical phrenologist. Another writes to ask us how long it will take and what our charge will be to give private instruction to a student. We desire to say to all who wish to learn Phrenology thoroughly, that we can not take single pupils. Once a year we instruct a class, and devote weeks of our time to that work. The next class will open Nov. 4th. Those who would learn relative to the course of instruction, terms, etc., will receive circulars, on application, by mail.

THE LATE JOHN HECKER.

MR. HECKER, widely known as a philanthropist and Christian gentleman, was born in the 7th Ward of the city of New York, on the 25th of July, 1812, and resided there until a few years previous to his death. In 1835 he established a large bakery in Rutgers Street, and speedily secured, by his industry and integrity, extensive patronage. In connection with his brother, Mr. George V. Hecker, he erected in 1842 the well-known Croton Mills, prosecuting the milling business under the name of Hecker & Brother. Such was the popularity of Mr. Hecker in his district that in 1850 he was nominated for Congress by the Free Soil party, but, the party being largely in the minority, he was unsuccessful. In 1854 he was chosen by a

large majority to represent the 7th Ward in the Board of Aldermen. Prior to this, in 1850, he published a periodical known as the *Unit*, in which he delineated the characters of Senators Benton, Seward, Cass, and other prominent statesmen. Two years subsequently he founded and opened an Episcopal mission and chapel at 256 Madison Street. This was afterward removed to 58 Rutgers Street, where it has been maintained by the deceased until the present time. In this chapel he introduced High Church ritualism and also the choral service, this being its first presentation in the Episcopal Church in this country. In 1857 Mr. Hecker assumed the editorial control of the *Churchman*, a paper published under the auspices of the Episcopal Church, and continued its publication until the first year of the late civil war. Under his management it attained a high degree of popularity and influence.

In the summer of 1864 he signed an application for an injunction to restrain the payment of certain pay-rolls alleged to be fraudulently presented against the city. In consequence of this act he was attacked by a mob in the City Hall Park, and his life seriously endangered. As an evidence of their appreciation of his fearlessness and patriotism, the Citizens' Association, at that time a most influential political organization, unanimously nominated him, in the ensuing fall, as their candidate for the mayoralty. During this year he was appointed an Inspector of Public Schools, in which position, notwithstanding political changes, he was retained until his death.

The question of popular education had for a series of years largely engrossed the attention of Mr. Hecker, which finally culminated in the publication of his views in a volume entitled, "The Scientific Basis of Education."*

This work has received the unqualified indorsement of a large number of the most prominent educators of this and other States. In July, 1873, the degree of "Philosophiæ Baccalaureus" was conferred upon him by the Zetetic Society for his distinguished honorable service and merit in the cause and development of zetetic philosophy, and for his researches and attainments therein.

Perhaps Mr. Hecker was best known to the

* Price, \$3. May be had at this office.

public in his business relations, and the firm of which he was a member ranked among the most extensive manufacturers of flour in the Union. During the past few years the health of Mr. Hecker sensibly declined, in consequence of which he was compelled to relinquish active participation in his business. He left a mother, a wife, a son, and two daughters. His brother, Mr. George V. Hecker, survives him, as also another brother, the popular and eminent Paulist Father, Isaac T. Hecker, now traveling in Europe.

At another time we propose to give a more appreciative review of Mr. Hecker's life and character in the PHRENOLOGICAL JOURNAL, in which his name, or his initial, "H.," has often appeared.

FIZZ, WHIZZ, BANG!

HURRAH for THE FOURTH OF JULY! Look here, Mr. John Chinaman, we can celebrate our national birthday without the aid of your miserable fizzling fire-crackers. Little boys burn their fingers with them, little girls burn their dresses with them, and houses and cities have been destroyed by these silly, heathenish, fizzling things. Remember Portland, which was burned at a loss of \$10,000,000, and all because of a fire-cracker, on the Fourth of July, 1866. They frighten horses, too, which run away sometimes with women and children, dashing all to pieces. Why not stop the nonsense? We say, *No more* fire-crackers! The way to celebrate the day is to rise betimes in the morning, and thank God that you are in the enjoyment of so many of His blessings. Then take a morning hand-bath, put on a clean shirt, eat a light breakfast, and then, with all the family, sing "Hail Columbia" and "Praise God from whom all blessings flow." Then attend to such duties as necessity requires, after which repair to the church or public hall, and listen to the oration, the music, temperance addresses, and to such other patriotic entertainments as may be prepared for you.

Then meditate on your duties as a citizen of this great Republic. Consider whether you have done, or are now doing, your whole duty. Whom did you nominate for office? For whom did you vote? Is the man whom you elected to a responsible office honest?

Is he clean? What are his habits? What are his antecedents? Has he a good record from boyhood up? Or, does he drink? Does he stink of beer or of tobacco? Was *he* your candidate? Then you need not cry out against corruption. We shall continue to have thieves in office so long as we elect drunkards, tobacco sots, pot-house politicians, and blacklegs to office. Slavery demoralized many, the late war demoralized more, and we now suffer for these sins. But sincere penitence will bring pardon. Then right future conduct secures every reasonable blessing. God bless our country!

THE MILL RIVER CALAMITY.—Our readers are well informed of the details of the terrible deluge occasioned by the breaking away of an imperfectly constructed dam; how three villages in a valley of Massachusetts, but a short time ago teeming with beauty and industrial enterprise, were, in the space of a few hours, swept almost entirely out of existence, and upward of 150 men, women, and children drowned with scarcely a moment's warning of their danger.

Again are we impressed by the fact that there are men whose love of gain renders them careless of the lives and property of others. But are the owners of the Hayden reservoir irresponsible for the destruction their crazy dam has wrought? And what award in "damages" can compensate for the many valuable lives and happy homes their willful neglect has been instrumental in crushing out of existence? The inquest at this writing is still in progress, and thus far the evidence elicited is very damaging to those concerned in the construction and ownership of the reservoir.

VERDANCY VICTIMIZED.—An affidavit was made by a man giving his name as H. W. Jones, of St. Louis, Mo., before Judge Bixby, at the Tombs Police Court yesterday, to the effect that on Saturday the deponent was accosted on Broadway, near Houston Street, by a man who claimed to be an acquaintance, and who told him that he had just drawn a lottery prize. The two became quite familiar, and Jones was induced to go into a gambling house, No. 417 Broome Street, and engage in the play of banco, where he soon lost four gold sovereigns and a valuable gold watch. He informed Officer McDougal of his misfortune, who proceeded to the place designated, recovered his watch and money, and arrested one

Richard Marsh, suspected of having defrauded Mr. Jones. But on the arraignment of Marsh Jones swore he was so excited during the whole transaction of the day before, that he was unable to identify the man who accosted him on Broadway, and afterward played banco with him at No. 417 Broome Street, and therefore had no complaint to make against the prisoner, who was discharged.—*City Paper*.

[Here is a single case brought before our courts, while the probabilities are that there were a hundred other cases not reported. Question: Why don't our city authorities break up and put a stop to this sort of bold robbery? It is their duty to do so, and we, as citizens, demand action in the matter. It is a shame and a disgrace to permit these gamblers and thieves to prey on strangers, and thus bring our city into further dishonor. Clear out the gambling, and there would be less burglaries, till robbing, and petty thieving.]

How to SWIM.—Among the useful athletic exercises, for both sexes, is that of SWIMMING. In France, soldiers, in companies, are trained to perform certain evolutions and exploits with arms, in deep water! Men who are thoroughly trained in this can perform marvelous feats, even in mid-ocean. One good swimmer has been the means of rescuing many lives from watery graves, transferring passengers from a burning ship to a float or a raft, and thence to a place of safety. One falls overboard, who can not swim, and is drowned, while, if he had learned the simple art, his life would have been saved. Boys and girls from eight to ten years old, may learn to swim in an hour. Facilities should be afforded for this, and every human being should learn to swim. See the book.

PROF. DAVID SWING.

IF the agitation of thought be the beginning of wisdom, we may hope for something wise, or otherwise, in the theological controversies now going on in many of the churches. How fortunate for the white cravats that men are no longer burned at the stake on account of honest differences of opinion! Inasmuch as no two men look exactly alike, it is not surprising that no two men think exactly alike. Nor is it mere education that makes these differences; it is organization. We differ in temperament and in the color of our glasses—faculties—through which we look at subjects. Readers will be interested in the accompanying sketch of Prof. Swing, whose portrait we give herewith. We regret we have not that of Prof. Patton, editor of *The Interior*, who instigated the late trial in Chicago, and whose charges were declared not sustained. It would be interesting to put the two heads together and compare them. Better still, to have a careful phrenological analysis of the two men, with a corresponding analysis of their opinions, doctrines, and beliefs.

By the politeness of Messrs. W. B. Keen, Cook & Co., publishers of Prof. Swing's "Sermons," we are enabled to present herewith the likeness of Prof. Swing.

That is evidently an original character. The features are conspicuous. The head is long and high; the brain is large, the temperament indicating great flexibility rather than rigidity. He is large in Benevolence, and, consequently,

liberal, sympathetic, and charitable. His prayers include mankind rather than God bless

"Me and my wife,
My son Jo and his wife;
We four and no more, for God's sake."

He has a fine intellect and can reason correctly, and does his own thinking. He is not puffed up with over large Self-Esteem; nor is his love of praise so great that he would forfeit independence to secure the smiles of Mrs. Grundy. In head, temperament, and character he is something of the Beecher type and make-up. He has an easy, open, kindly expression, which seems to say "Come! Come into the joys of the Lord," rather than that severe, cold, and forbidding look which says, "Go! Go to the—bad place, or do as *I* say." There are such men in the pulpit, and out of it, we regret to say. Prof. Swing, like H. W. B., has more active Benevolence than blind Veneration. Below is an estimate of the two Chicago theological professors who have recently had a controversy something like that which took place in Brooklyn last spring:

Prof. Swing's age is 41. He is a native of Ohio. Near its great metropolis he was born, and on a farm in the great Ohio valley, and by the banks of the quietly moving river, he spent his childhood. His education was received at Oxford, in the same State, with which institution, in time, he was himself connected, and from which he was called to the Westminster Presbyterian Church about eight years ago.

He has had a fine opportunity of becoming quite familiar with the broad prairies of Illinois. In his church work he has been faithful, and when it was proposed to unite his society and the North Presbyterian Church, just before the great fire, he was chosen the pastor of the consolidated congregation. The public are familiar with his subsequent history.

The trial took official form at the meeting of the Chicago Presbytery in the chapel of the Third Presbyterian Church, April 13th, at

PROF. SWING AND PROF. PATTON.—PEN PICTURES BY THE REV. C. J. THOMPSON, A FELLOW-PRESBYTER.

Who are these men? Both bear the title of Professor. Both are good preachers, and good fellows, and somewhere in that neighborhood the resemblance ends, for these two men are singularly unlike. A word about their *personnel*, physical and mental. If you happen into the Fourth Presbyterian Church at half-past ten of a Sunday morning, you will see on the



*Yours friend
David Swing*

which time Prof. Patton laid before that body his two charges and twenty-nine specifications. These, however, were put into the hands of a committee for revision, of which Rev. Dr. R. W. Patterson was chairman, the report of which and adoption as revised, was made at an adjourned meeting, a few days afterward, at the Second Presbyterian Church. At the same time the charges and specifications were placed in the hands of the accused, and the witnesses were summoned.

pulpit platform a very quiet, unassuming man, of medium height, weight, and age, with smooth face, brown hair combed back, friendly eyes, well-molded forehead, good-sized mouth, and heavy jaws—that is Prof. Swing. When he begins the service you perceive he is not a graceful man. His voice has a singular drawl, yet not wholly unpleasant. Its tones are persuasive, and suggest a gentle spirit. He does not stand erect, but half leans upon the desk, and reads the Bible, or engages in prayer in

subdued and measured tones. You will not listen long till you conclude there is not much self-consciousness there. As the sermon proceeds you become interested. Uncouth manner, awkward gestures, and poetic thought have a fitness about them that makes an attractive *tout ensemble*. You become aware, as you are quietly borne on from sentence to sentence, of a mind that sees things in large and general relations. There is a certain indefiniteness of statement that suggests a long perspective of thought. There is no clank of surveyor's chain, but only the sliding in and out of the object-glass that adjusts your vision now to one focus, now to another, but always to a beautiful picture. When he closes you perceive he has led you through a very pleasant land, shown you some stimulating truths, and perhaps grounded you in certain broad principles which underlie the separate forms of church life or doctrine. He has not analyzed much, but he has created a good deal, and leaves you to make your own arrangement and application. As you leave the sanctuary you will probably have some such impressions as these: That man has not striven after any effect, but his thoughts run in his own mold, and have been before me in a form unhackneyed. He has not clearly asserted any new proposition, but he has been climbing to a broad view that holds within its picture-lines many propositions. He has not specially defined truth, but he has suggested certain views which may lead me to a definition. In a word, he has not exactly preached to me, but he and I have had a ramble in fields that hold within them the possibilities of a good harvest. And, especially, I think the vital force of that sermon was in a tender, earnest sentiment, a kind of implied friendship be-

tween us, and an implied aspiration in his heart and mind toward a higher life. And if you should thus judge, you would not greatly misjudge the preacher.

Step over now into a neighboring church. A tall, slender, straight young man looks directly at you through a pair of spectacles, and announces his text in clear, positive tones that at once suggest deep conviction, and that man is Prof. Patton. He is so very thin he looks uncomfortably frail, but he comes down on his text with a solid emphasis that indicates no disposition to spare the flesh. He has no notes. There is no introduction to his sermon. He plunges straight into the argument in phrases far enough from stilted, and in clear-cut propositions which are far enough from dullness. His tone is conversational. His manner and matter are exceedingly frank and manly. His process of thought logical and unhalting. The sermon is doctrinal, but not bony. It has life-color, and is rounded off with apt and fresh illustrations. From first to last he goes fluently on. The thoughts succeed each other in such bright movement no attention can flag, and when he suddenly closes you realize that you have got quite a body of divinity to meditate upon. As you walk out of the house very likely you will say, Well, this man, in sincerity, frankness, manhood, the same as the other, is his intellectual antipode. If the other was a picture, this is surveyor's chain flashing in every solid link. His convictions are deeply cut, and earnestly put. He will stake his life on the truth he sees and speaks. It is lively, rattling logic, brought down to date—Calvinistic Young America. And if you should thus judge you would not greatly misjudge the preacher.

AGRICULTURAL HINTS.

Education Pays on the Farm.—A graduate of Harvard College, possessed of means, and, what is better, of brains, has gone into the dairy business. He has ninety head of Jersey stock, and milks twenty cows regularly. He has a model milk house, furnished with ice and labor-saving machinery for making butter, and, by keeping the conditions always the same, makes the same quality and amount of butter the year round. He obtained ninety cents a pound for his butter in Boston. Here is proof that a farmer may be educated and a gentleman, and yet be successful when

he goes to work himself, and applies his intellect to business, just as may be a lawyer, a doctor, a preacher, or any other man.

Cut-Worms.—In an answer to the inquiry—"What will prevent cut-worms from destroying onions?"—a correspondent writes the *Country Gentleman* as follows: "I will state from forty years' experience, that late plowing in the fall or winter (if there is hard freezing after plowing) will certainly destroy them. I have four acres where onions have been raised for sixty years, with the exception of two; and one of those years the four acres were sown and

weeded out the second time, all standing well. The cut-worms commenced their work, and notwithstanding bushels of them were killed, they cut off about every onion, and the 4th of July the land was plowed up. This led to experiments, and the land was plowed three or four times that fall and winter; but once plowing has proved sufficient, as for thirty years since following that practice there have not been any cut-worms on the land. I think the onion maggot can be disposed of in the same way, as I have seen but very few onions destroyed by them. These depredators make the arrangement for their succession in such a manner that any cold or storm of winter will not affect them; but by stirring them up and materially changing their position, the skill of instinct is lost, and they are destroyed.

How Much Seed?—Of course every farmer is supposed to know how much seed-wheat is required to the acre to produce the best yield; but does every farmer really know this? Has he repeatedly made test experiments on the same land, fitted and sown at the same time, and harvested and measured the product, or is his opinion mere guess-work? The wheat fields of England produce as a whole average more wheat to the acre than any other country.

Wheat has been grown on their lands for centuries with no diminution of product, but rather an increase. Of course this has grown out of judicious rotation, the free use of manures, and scientific culture. But does not this kind of culture include as well the quantity of seed sown to the acre, as its managements in other respects? In taking up an English exchange, the *Farmer*, we find that the first wheat seedings in the fall, only a bushel of seed was given to the acre; that a month later two bushels were used, while the last sowings as many as four bushels to the acre were not uncommon.

We doubt very much whether our farmers make any such differences in the quantities of seed, as depending upon early or late sowing. Many sow more wheat on late sown ground, but do we ever make so great a difference as do the English in this regard? And if not, are we or they in the wrong in withholding, or needlessly sowing more seed, than will produce the best returns?

A Simple Timber Preservative.—To render posts or timber, placed in the ground, practically impervious to moisture, and for a long time prevent decay, the following simple

recipe has been tried and found to answer the purpose excellently. For fence and gate posts, it is particularly recommended: Take linseed oil, boil it, and mix it with charcoal dust until the mixture has the consistence of an ordinary paint. Give to the posts a single coat of the mixture or paint before planting them, and no farmer, says one who has used it, living to the age of the patriarchs of old will live long enough to see the same posts rotten. The posts or timber should be, of course, well seasoned and dry when the paint is applied. They should be set smaller end down, to prevent water from working into the posts.

One of the most satisfactory, useful, and best of all our "public documents," is the **MONTHLY REPORT OF THE DEPARTMENT OF AGRICULTURE**, compiled by that honest veteran, Mr. J. R. Dodge, statistician. There is no single agricultural journal in our country which gives anything like the exact and reliable information contained in these excellent Reports. Copies should be placed in the hands of the entire newspaper press, and by it well copied for the information of our people.

Value of Walnut Timber.—As an illustration of the increasing value of walnut lumber, the *Indianapolis Journal* notes that the standing walnut trees on a half section of land on Eel River, in Miami County, Indiana, were recently sold to a lumber dealer for \$17,000. There is a large amount of other timber on the tract which is not included, only the walnut timber being sold. Walnut lumber is coming more and more into use throughout this country and Europe, and at present a very large business is done in preparing and shipping it from Indiana.

Take Care of the Harness.—Oil and repair it. Unbuckle all the parts and wash clean with soft water, soap and a brush. A little turpentine or benzine will take off any gummy substance which the soap fails to remove. Then warm the leather, and, as soon as dry on the surface, apply the oil with a paint brush or a swab. Neatsfoot oil is the best. Hang up the harness in a warm place to dry, but do not let it burn.

Before you go into a lawsuit, carefully calculate your cost if you should gain it, and see if you had not better put your money into a sheep, a new carriage for your family, a cow for son or daughter, or a thousand other things that might give you much more profit and happiness. The malicious delight you feel

in gloating over a neighbor's discomfiture is not happiness, but only its miserable counterfeit. It is a disposition near akin to that which lost spirits feel. Root this out of your heart, if you would not forever be miserable.

IMPORTANT EVENTS WHICH OCCURRED IN JULY.—July 1. Charles Goodyear, inventor in India rubber, died, 1860; Bishop Hall born, 1574; Battle of the Boyne, 1690—2. Hahnemann died, 1842; Rousseau died, 1778—4. Independence declared, 1776; Thomas Jefferson died, 1825; John Adams died, 1825—5. Battle of Chippewa, 1814—6. Chief Justice Marshall died, 1835; Daguerre died, 1851—8. Edmund Burke died, 1797; Peter the Hermit died, 1108—9. Dr. Chas. Caldwell,

Phrenologist, died, 1853; Gen. Taylor died, 1850—10. John Calvin born, 1509—11. Battle of Rich Mountain, 1862—12. Julius Cæsar born, 100 B. C.—13. Rufus Choate died, 1859—14. French Revolution began, 1789—15. Stony Point taken, 1778—16. Close of New York Riots, 1863; Margaret Fuller Ossoli died, 1850—17. Isaac Watts, poet, born, 1674—20. Petrarch born, 1304—21. Robert Burns died, 1796—22. John C. Roebling died, 1869; Hayti independent, 1801—23. Battle of Manassas Gap, 1863; Winchester taken, 1864; Bagdad sacked, 1401—Curran born, 1750; Jane Austin died, 1817—25. Gen. Henry Knox born, 1750—26. Coleridge died, 1834—27. Thomas Campbell born, 1777—28. Atlantic Cable laid, 1866—29. Dr. Thomas Dick died, 1857—30. William Penn died, 1718; Almira Elizabeth Guernsey born, 1843—31. Ignatius Loyola died, 1556.

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

SHOULD WE MARRY?—Is man morally bound to get married, or not?

Ans. Some take the ground that those who marry fulfill their natural destiny, while those who do not marry live in an abnormal condition. St. Paul appears to dissuade marriage, but we think that a careful consideration of the context, in which occurs his often-quoted statement, "I would that all men were even as I myself," shows that it was more the expression of personal opinion than an injunction proceeding of higher authority than himself. St. Paul rightly appreciates the relationships of society, and the influence of organization. His admonitions in those celebrated 6th and 7th chapters of First Corinthians indicate a wide knowledge of human nature. The same Apostle, in other places, speaks most approvingly of marriage. In his First Epistle to Timothy he speaks warningly of the rise of notions in "the

latter times," when among things improper and sinful there shall be prevalent views unfavorable to marriage. We hold that every man normally constituted, of suitable age, and capable of sustaining a wife and family, should marry—not carelessly, not through caprice, but when intelligently appreciative of all the circumstances and conditions relating to married life.

APOPLEXY.—Why is it that so many of our old men die of apoplexy, or disease of the heart? It is becoming very common among our great men.

Ans. The reason is that coffee, spices, and tobacco have come into excessive use, and these three articles have a direct tendency to disturb the action of the heart. When the heart acts irregularly, it may throw too much blood upon the brain, causing apoplexy; or, it may stop, and the patient dies of asphyxia. In popular thought either mode of death is by apoplexy, though really only the former can be properly so called. Few people can use coffee or tobacco without inducing the liability to sudden death by irregular action of the heart.

DEPRESSION IN THE FOREHEAD.—What is the meaning of the depression which I have in the center of my forehead, and how can it be filled up?

Ans. The depression may arise from largeness below and above the point you speak of, and not from any special smallness of the organ of Eventuality, where the depression appears. We sometimes find small valleys on high ground, caused by a rim of hills, which make the center seem depressed or low. If you will send a postage stamp

and ask for the "Mirror of the Mind," you will learn something from it about the different shapes of heads which may interest and instruct you. It will also show you how to have likenesses taken for phrenological examination, which will tell you the meaning of all the eminences and depressions on your head, and how to improve defects, diminish and weaken excesses, and choose a pursuit in consonance with your talents and character.

"MOON-STRUCK."—Is there such a thing as being "moon-struck?" I heard an old sailor say that seamen never dare sleep on deck when the moon is shining brightly; that if they do, their heads will be twisted or turned in the direction the moon appears to go. I know a man who slept one night on the prairie, when the moon shone brightly, and the next morning he arose with a peculiar pain through the chest, from which he has never since been free. He says he was "moon-struck." How is it? C. C. P.

Ans. The moon was, in ancient times, an object of worship, and most prevalent notions concerning its influence were derived from old-time superstition. In England, as late as the seventeenth century, the common people regulated many household and agricultural duties by the "age" of the moon.

Some fishermen have fancies, or superstitions, as to the effects of the moon on fish when exposed to moonlight. Many farmers are said to plant potatoes—to secure more tubers than vines—in certain states or conditions of the moon. They also kill hogs, with reference to the pork swelling or shrinking when cooking; if killed when the moon is fulling, the pork will swell when boiling; but, if killed in a waning moon, the pork will shrink when cooking, and so forth.

As to the man who slept "out on the prairie," and took "a peculiar pain in the chest," we can only infer that he already had some bodily infirmity, perhaps rheumatism, which became more evident from this new exposure.

That the moon has marked effects on the life of plant, animal, and man, there can be no doubt; but whether one may be "moon-struck" in the sense that one may be "sun-struck" is to be doubted.

"WALKING DICTIONARY."—To whom was the appellation "Walking Dictionary" applied?

Ans. This question we can not answer with certainty, but think it was Samuel Johnson, LL.D. Can any reader give us positive information?

LEAP-YEAR DAY.—If a child is born Feb. 29th in leap year, what will be his birthday the following year?

Ans. His anniversary would occur on the last day of February every year. To be nice about it, if he were born at 12 P.M. Feb. 29, he would be a year old at 6 A.M. March 1st; two years old at 12 M. March 1st; three years old at 6 P.M. March 1st, and four years old Feb. 29th at 12 P.M., since the year contains 365 days and six hours.

HOW MUCH SLEEP.—I am eighteen years of age and retire at 9 P.M., sleeping soundly until 6 A.M., and then rise reluctantly. If I retire at 8 P.M. I do not wake any earlier, nor do I wake later if I retire later. Should I sleep as long as I do, viz., nine hours, or should I limit the time, to say eight hours?

Young people and children need more sleep than persons between thirty and forty-five years of age. You may overwork and thus exhaust yourself; you may eat wrongly, too much sugar, butter, pastry, or pork. Eat a light, simple supper, and ventilate your sleeping room, and if you want ten hours of sound sleep for the next seven years, take it. As sleep is the only means of rest which the brain has, there is no greater unwisdom than that which leads to the habit of sleeping too little. Generally eight hours for work, eight for rest, study, and recreation, and eight to sleep is a good rule.

SIZE OF BRAIN.—I have a son two years old, delicate physically, whose head measures 19 inches. Is his brain too large for his age and physique? What should be the size of the head of a healthy child two years of age? V. D.

Ans. We often find children two years old with heads 19 inches in circumference. It is rather too large for one of ordinary bodily development and health, and decidedly so for one who is delicate. Give the child unbolted wheat bread, oatmeal or mush, with milk. This diet will make his bones and muscles grow, and increase his vitality, so as to sustain his large head. If such a child be fed on fine flour bread, and butter, cake, pies, rice, pork, sugar, and tea, he will become more feeble—the head will "eat up the body." Give him also sunshine and an abundance of sleep.

SMALL SELF-ESTEEM.—Though a wife and a mother, I can not overcome a disposition to doubt my own abilities, and constantly look up to others. How can I overcome it?

Ans. Cultivate Self-Esteem. Try to realize that you have just as good a right to live in this world as the best one in it—providing you behave as well. Hold yourself accountable to your Maker, rather than to men and women.

THAT STAR.—What does that star indicate just above Alimentiveness, below Construction, forward of Acquisitiveness, and back of Tune in the symbolical head?

Ans. It has been thought to have reference to appetite for air. Some regard it as the tool-using part of Constructiveness. It is open for inquiry.

HISTORY OF ENGLAND.—A small and good work is White's; price, \$2.50. Froude's History is elaborate and comprehensive, and of great value, extending to the death of Elizabeth; in 12 volumes, from \$21 to \$50, according to binding. Lossing's History, a popular work, \$2.50.

STUDY HOURS.—Is it best for a student to study before or after midnight?

Ans. As long before as opportunity, health, and comfort will permit; no one should sit up

late at night poring over books or papers. The habit is bad for the eyes, the brain, and the health generally. —

"WHAT ARE MY TALENTS?"—A lady correspondent, writing from Alabama, states that she has, for the past twenty years, been trying to find out what, if anything, she may be good for; or how she may turn whatever talent she has to some account. She seeks the aid of Phrenology, believing it may disclose to her what she is, what she can do best, and thus relieve her mind of this painful doubt and uncertainty. But there is no phrenologist near, and she asks, What am I to do?

Ans. By the use of "The Student's Set" she may learn the location of all the different organs of the Brain, their size and function, and thus be able to "read her own character." The next best thing is to send stamp for "The Mirror of the Mind," which explains how character may be delineated from photographs.

A SUGGESTION.—**DEAR EDITOR:** In the present state of the public mind I believe it would add greatly to your interesting JOURNAL to make a separate and distinct department for the discussion of *phenomena*, and to invite from every part of the country communications on the subject—questions, and answers from yourself.

Ans. We suppose our friend alludes to mental "phenomena," and we see no objection to his proposal, providing such discussion did not run into fathomless depths, or into illimitable space. It should be remembered that the human mind is finite, and may not comprehend *all* things. When we discuss science—which is tangible—we may hope to bring all minds to one conclusion; but when we pass the lines of the known, and come into the realm of the unknown, we find, as in theology, the greatest diversity of opinions and beliefs. It will give us pleasure to receive from the more advanced minds all they *know* that is new and curious, and at the same time we will tell what we know.

What They Say.

MORE DREAMS AND THEIR FULFILLMENT.—We know not what mysterious power presents to man in his hours of slumber the realities of the unknown future, and events that are hidden from the view; but this we must believe, that the veil which enshrouds the beyond seems raised to disclose to some the secrets of life's dark ways. I have just read a very interesting article on the above subject in the April number of the PHRENOLOGICAL JOURNAL, which brings to my mind vividly a signal and providential confirmation of the idea intimated in that account. It has aroused considerable curiosity and comment in our vicinity.

Among the most faithful and trustworthy men employed by the N. Y. C. and H. R. R. Co. is Henry Hall, who has for several years been a superintendent upon the old road between Syracuse and Canandagua. He has reached an advanced age, and most of his days have been spent

in promoting the interest of the above company. As a natural result, he understands his business thoroughly, and his services are held in high esteem by all of his acquaintances. But new officers were placed over him who were unable to estimate his worth, and he fell a victim to the reducing mania inaugurated by Vanderbilt, and another took his place. But these men have since discovered Mr. Hall's merited popularity and position among the people, and are now courting his favor. He did not rave, as many did, when told his services were not required, but took all quietly, and even volunteered to introduce his successor to his work, as he was a raw recruit. Men laughed at his constancy, but to no avail. This he did gratuitously, and took as deep interest as usual in the welfare of the road.

One night, after his successor was able to stand alone, he had a remarkable dream. He dreamed that a rail near the draw-bridge at Cayuga was broken into three pieces. He saw it so plainly that it was impossible to banish the impression from his mind. He did not believe in forewarnings by dreams, for I had a discussion with him upon the subject about a month ago, in which he stoutly denied the idea. He went to the depot at Auburn the next morning, and finally concluded to go to Cayuga. After the cars began to thunder on their way, he began to reprimand himself in this wise, "Why, what a fool I am! Here I am going to Cayuga because I happened to dream something, and want to see if perhaps it may possibly be true. Pshaw, what nonsense!" He got off the train at Aurelius, and determined to return to Auburn by the earliest opportunity. But the phantom still haunted him, and his conscience could only be quieted by taking the first train for Cayuga. Having arrived at the station, he instantly started in the direction the midnight vision had led him. His brother, who is road-master at Cayuga, observing this peculiar action, and wondering at it, immediately followed him. They soon reached the place, and to the astonishment of both they found the identical rail in three pieces.

The next train, which was a passenger, must have inevitably been thrown from the track, and much property would not only have been destroyed, but many people would have been maimed or killed. Our skepticism will scarcely be so strong that we will not conclude that this was a Providential occurrence. I am ignorant of the natural or supernatural agencies which consummated in such a happy result, and leave the complicated problem to be solved by some great philosopher of the future.

TEACHING PHRENOLOGY.—The following explains itself. We commend the plan.

PITTSBURGH, PA.—**EDITOR PHRENOLOGICAL JOURNAL**—*Dear Sir:* There has been a considerable stir in this community of late on the subject of Phrenology, caused, as I suppose, by one of the gradu

ates of your late class, Mr. McCrea, calling here and delivering several lectures on the subject.

He has given great satisfaction to the people here; so much so, that there is a very strong desire with a goodly number to form themselves into a class in order to try and obtain still more knowledge on the matter, each one bringing his or her mite into the general treasury of information.

So now the case is before *you*, and we would like to know whether you think such a course of procedure would be advisable or not; and if so, what books, etc., would be necessary to carry on the movement successfully.

Hoping you, out of the goodness of your heart, may feel inclined to give us all the information you can relative to this matter,

I am, faithfully yours, etc.

[Each person should have a phrenological bust on which the organs are named, located, and numbered. Each should also have the hand-book "HOW TO READ CHARACTER," and such other works as he may be able to procure; "New Physiognomy" would be useful. Indeed, "THE STUDENT'S SET" would be just the thing.

When fully organized, and a permanent society established, it would be well to procure "A CABINET OF PHRENOLOGICAL SPECIMENS," consisting of forty casts from living heads and from remarkable skulls—the best specimens in our entire collection. The cost for this cabinet, packed ready for shipping, is only \$30. A complete list will be sent on receipt of stamp. Address this office.

THE KEY-NOTE OF REFORM.—A correspondent thinks that it is time for the lovers of law and true order to organize a Reform party rallying upon Temperance and Woman Suffrage. He says:

"We would never have had a free nation if the old Free-soil party had not been formed; therefore, I can not see how we can expect the temperance cause to flourish if we do not show our faith in our works. It is wonderful to see the widespread attention to the subject; almost daily the papers give some account of a meeting. Our politicians are cowards; they hate prohibition because in our large cities the rum element controls the political machine."

FUTURE POSSIBILITIES.—*Mr. Editor:* I read an article in the May number of the JOURNAL about "Future Possibilities," with the signature "Jno. W. Deem." He says: "I firmly believe that the time is not far distant when the telegraphic system will be superseded by the science of thought. Correspondence by letter will shortly be unknown. Friends, though hundreds of miles apart, can then communicate with each other through the medium of thought. Then it will be impossible to deceive," etc. I will not deny that such an undesirable occurrence *may* happen in the future, for "With *God* all things are possible;"

but I think it highly improbable. If Mr. Deem or any one else believes it to be probable I would like to read their reasons for such a belief in your valuable JOURNAL.

H. W. DAVIS.

WISDOM.

WE must be afraid of neither poverty, nor exile, nor imprisonment; for fear itself only should we be afraid.—*Epictetus*.

HE who blows the coals in quarrels he has nothing to do with, has no right to complain if the sparks fly in his face.

EVERY man is an original and solitary character. None can either understand or feel the book of his own life like himself.—*Cecil*.

A WESTERN moralist thinks that the two great evils of the present day are "intoxication and costly funerals." And are they not closely related?

EXPERIENCE keeps a dear school, but fools will learn in no other, and scarce in that; for it is true we may give advice, but we can not give conduct.—*Franklin*.

THOU must be true thyself

If thou the truth would'st teach;

Thy soul must overflow, if thou

Another's soul would'st reach;

It needs the overflowing heart

To give the lips full speech.

HELPING ANOTHER.—It is one of the most beautiful compensations of this life that no man can sincerely try to help another without helping himself.

HE is wisest who best utilizes his circumstances, or, to translate it, his surroundings; and happiness, if we deserve it, will find us wherever our lot may be cast.

WATER is the strongest drink; it drives mills; it is the drink of lions and horses; and Sampson never drank anything else. The beer, wine, and tobacco money will soon build a house and make a fortune.

THINK truly, and thy thought

Shall the world's famine feed;

Speak truly, and thy word

Shall be a fruitful seed;

Live truly, and thy life shall be

A great and noble creed.

PHYSICAL suffering and enjoyment are only means for the control of the spiritual. If we look upon them as finalities, we can not regard God as love. That physical life is so uncertain shows that it is not an object, but only a means.

EVERY condition of life has its advantages and its peculiar sources of happiness. It is not the houses and the streets which make the city, but those who frequent them; it is not the acres which make the country, but those who cultivate them.

MIRTH.

'A little nonsense now and then
Is relished by the wisest men.'

THE greatest magicians of the age are the paper makers; they transform the beggar's rags into sheets for editors to lie on. The rascal who wrote the above must allude to the "blanket" sheets some of our publishers boast.

A PRINTER was paying court to a young lady—it must be remembered that printers are like other people in that respect. Some one told the lady's father that the young man was soon going to Havre. On his next visit to his lady love, a few evenings after, the old gentleman asked him how soon he was going to Havre. "I will have her as soon as I get your consent; the young lady's I have," was the reply. It was given.



"O wad some power the giftie gie us,
To see our ousels as others see us!"

MRS. SLOPER.—Now, Charles, if you only knew how ridiculous you appear with your hat set on the back of your head that way, you would cease to mortify me by wearing it so.—*Smith's Bazaar.*

A DOWN-EASTER believes there is nothing like advertising. He lost his pocket-book recently, advertised his loss in the local newspaper, and next morning went down into his own cellar and found it lying on the floor.

Two Milesians were standing at the Fairmount water works, watching the big wheels splashing the water, when one of them remarked: "Mike, isn't this a quare country where they have to grind water before they can use it!"

A GOOD karakter is allwuss gained by inches, but is often lost in one chunk.

WE are surprised to learn that it only cost \$37,000 to support the idiotic and feeble-minded of the State last year. We do not believe the report covers the entire subject.

AN editor once wrote: "We have received a basket of strawberries from Mr. Smith, for which he will receive our compliments, some of which are four inches in circumference."

ENDEAVOR, if possible, to keep a clear conscience and two or three clean shirts. Rise with the lark, but avoid larks in the evenings. Be above ground in all dwellings, above board in all your dealings. Love your neighbor as yourself, but don't have too many in the same house with you.

A CORRESPONDENT writes to us that his little three-years-old Stella Capitola was looking out of a window one day when she saw a little, tailless dog playing on the sidewalk. In great excitement she screamed to her brother John, "Shonny, Shonny, tum here kick, Shonny, and see a itilly tail widout none puppy."

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

THE PERIODICAL LITERATURE OF THE UNITED STATES OF AMERICA. With Index and Appendices. By E. Steiger. Folio; cloth; pp. 139 and 14. Price, \$1. New York: E. Steiger.

Many of our readers will remember the interest which Mr. Steiger's collection of the newspaper and periodical literature of America in the Vienna Exposition excited among foreign publishers. 148 volumes comprised the vast material of that collection; 119 folios containing specimens of about 6,000 different newspapers, and 29 volumes containing the many miscellaneous annuals, directories, reports, pamphlets, etc., which go to make up the customary routine of American publishing interests.

Out of this difficult and expensive undertaking, or by way of converting it to some useful account, the volume whose title we have given has its origin. The performance of the work—arrangement, tabulation, index, typography, binding, etc.—is most creditable to Mr. Steiger. In this catalogue he has condensed such information as this with regard to current periodicals, severally, title, place of publication, language, number and size of pages, how often issued, price of single numbers and annual subscription, illustrated or not, subject-matter.

Mr. Steiger's appreciation of a want all feel who

are interested in American literature is shown in a "Specimen of an Attempt at a Catalogue of Original American Books, with Index of Subject-matters," which is bound within the same covers. We trust the compiler will be encouraged to continue this important effort, as he appears well qualified for its prosecution.

THE SERMONS OF HENRY WARD BEECHER, in Plymouth Church, Brooklyn. From *verbatim* Reports by T. J. Ellinwood. Two volumes. Ninth and Tenth Series. Octavo; pp. 482 and 503; muslin. Price, \$2.50 each. New York: J. B. Ford & Co.

CONTENTS OF TENTH SERIES, from March, 1873, to Sept., 1873:

Spirituality and Morality; The Spread of Christian Manhood in America; Crime and its Remedy; Reason in Religion; The Discipline of Trouble; Immortality; The Soul's Victory; The Narrow Way; Possibilities of the Future; Children; The Bible to be Spiritually Interpreted; Revelation a Stimulus to Human Reason; The Sense of an Ever-Present God; The Nature and Sources of Temptation; The Paternal Government of God; The Nature, Importance, and Liberties of Belief; The Mercifulness of the Bible; This Life Completed in the Life to Come; The Temporal Advantages of Religion; Salvation by Hope; The Christian Use of the Tongue; The Right Use of Retrospection; Healing Virtue in Christ; God's Mercy Independent of Sects or Churches; Faithfulness to Conviction; The Basis of Right Action; The Altars of Childhood Rebuilt; Paul and Silas in Prison.

THE AUTOBIOGRAPHY OF PARLEY P. PRATT, one of the Twelve Apostles of the Church of Jesus Christ of Latter Day Saints. Embracing his Life, Ministry, and Travels. With Extracts in Prose and Verse from his Miscellaneous Writings. Edited by his Son, Parley P. Pratt. Illustrated. One vol., octavo; pp. 512; morocco. Price, plain, \$4; morocco gilt, \$5. New York: Published for the Editor and Proprietor. Sold only by subscription.

Here is true Mormon history. It is not merely a labor of love by a devoted son to a revered father, it is the narration of one of the most eventful lives in the history of one of the most wonderful of religious epochs. It is no exaggeration to state that no other religion or mode of worship has had such a rapid and sturdy growth as that of the so-called Latter-Day Saints. Without accepting or rejecting Mormonism—or any other man-made creed or dogma—as a saving ordinance, we look upon this people as without a parallel in modern times. Joseph Smith, Brigham Young, Parley P. Pratt, and others have been star actors in this religious drama, and their names will go down to posterity as such. This autobiography is published in the best style, illustrated with portraits of Joseph and Hiram Smith, P. P. Pratt, Orson Pratt, etc., with views of houses, temples, scenery at Salt Lake, Indians in battle array, etc. We propose at another time to draw from the work some rich descriptions of personal experience in pioneer life. Meantime we commend the book to all who are interested in the rise, progress, and present condition of the Mormon religion throughout the world.

THE PARENT'S GUIDE; or, Human Development through Inherited Tendencies. By Hester Pendleton. New Edition, Revised and Enlarged. Duodecimo; pp. 203. 1874. Price, \$1.50. New York: S. R. Wells.

The editor of the *Historical Magazine* says: The author of this volume insists that there are laws of hereditary transmission in the moral as well as in the physical constitution; and that their teachings, as far as known, shall be honestly and earnestly regarded. She is evidently a sensible woman and entitled to the respectful attention of parents everywhere; and her subject is one which neither parents nor those who are not parents can disregard with impunity. —

ILLUSTRATIONS of the Influence of the Mind upon the Body in Health and Disease. Designed to Elucidate the Action of the Imagination. By Daniel Hack Tuke, M.D., M.R.C.P., Joint Author of "The Manual of Psychological Medicine;" Foreign Associate of the Medico-Psychological Society of Paris; formerly Lecturer on Psychological Medicine at the New York School of Medicine, and visiting Medical Officer to the York Retreat. One vol., octavo; pp. 415; muslin. Price, \$4. Philadelphia: Henry C. Lea.

Like his distinguished countryman, Mr. Buckle, who condensed the history of English civilization into a couple of portly volumes, so our author, Dr. Tuke, has squeezed, as it were, all the books written on the subject of body and mind, and pressed them into a handsome octavo of 400 pages. He advances no new theories, claims nothing in the way of original discovery, but gives the best of all that others have written, in a spirit of fairness and candor. We shall refer to this work again.

EQUITY, a monthly journal of Christian labor reform. Edited by Rev. Jesse H. Jones, assisted by Prof. G. W. Warren, Jr.; with the following regular contributors: Hon. E. M. Chamberlain, E. D. Linton, E. H. Rogers, Rev. W. F. Mallalieu, John B. Willard, Miss Jennie Collins, Hon. E. Wharton Collins; business manager, James E. Bates. Terms, \$1 a year, or 10 cents a number. Published in Boston. Address all communications to the editor of the *Equity*, North Abington, Mass.

Among the remedies proposed to better the condition of the laborer, the following is offered:

"The Christian Labor Union, of Boston, is composed of persons who seek to obey Jesus Christ's command, 'Follow me,' and to secure obedience to it in the conduct of every form of human labor.

"It adopts the Bible principles of the Hebrew Church in its relation to Land, Labor and Capital.

"It assumes that Jesus founded no new Church, but that He came to expand the one then existing into perfect form, by laying aside its cumbrous ceremonial, and unfolding to their fullness those spiritual principles in it which pertained to the temporal life of man, as well as by bringing man into a right relation to God.

"Believing that the poverty of the poor is very largely the cause of their absence from the Church, and of the low moral condition of some portions of them, the Christian Labor Union aims to at least point out that cause distinctly."

Whether these gentlemen may be successful or not in the reform proposed, we will not venture to predict.

Referring to the late strike on the N. Y. and Erie Railway, the editor says:

"Let no man misapprehend the meaning of this event. Orderly, industrious, sober citizens are driven by the injustice of a gigantic, unscrupulous corporation to a course of orderly violence. It is the most fearful event that has yet appeared upon the surface of society since the war. It foretokens that another Paul Revere's ride is coming steadily toward us out of the dim unknown before. It is the beginning of the war between the corporations and the people; and let all men take due heed. Is there yet wisdom enough in the land to forefend the swift approaching danger?"

Is this prophecy? Is the editor a "seer?" Can he see both sides of a question? He goes for the enforcement of the eight-hour law. Is this the right sort of teaching to bring labor and capital together? The following, however, is a good point:

"The full cure [for our unhappy condition] is two-fold—a change in the persons, and a change in the relations. The persons must be so changed, as to find their good in the good of others; rather than in their own gains at the loss of others. Today the hate of each class for the other is growing; and hate is the fire which burns unto utter death. The fire of hate must be transformed into the life of love. This change can only be wrought by a Divine power; and they only can help in that work who carry both classes in their hearts."

Then let us invoke that "Divine power" without ceasing. Instead of strikes—which have no business in a Democratic-Republic, and must not be permitted—it should be that a man may quit work when he likes, but shall not obstruct public highways or prevent others from working if they wish so to do.

DAVID SWING'S SERMONS. With Portrait. Including David Swing's Trial for Heterodoxy. Octavo; pp. 144. Price, in paper, \$1; in muslin, \$1.50. Chicago: W. B. Keene Cook & Co., 1874; New York: S. R. Wells.

Here is a list of the sermons which have caused such a commotion in the Presbyterian Church of Chicago:

A Broad Orthodoxy; Influence of Democracy on Christian Doctrines; The Joyful Sunday; Soul-Culture; A Missionary Religion; The World's Great Need; The Gradual Decline of Vice; A Religion of Words; The Value of Yesterday; Variation of Moral Motive; Christianity a Life; Old Testament Inspiration; Salvation and Morality; The Woman's Temperance Revival; On the Deaths of Chief Justice Chase and John Stuart Mill; Charges and Specifications; Prof. Swing's Trial; Prof. Swing's Declaration.

A man-made creed seems to be as necessary to a Church as to a political party. It can not, however, in the very nature of things, be unalterably fixed for all time. Man grows, things change, and nobody really believes in human infallibility. Therefore, so long as there are political creeds, or religious creeds, there will be splits, schisms, new schools, old schools, high church, low church, and a hundred and one differences in opinion. Hence secessions, conventions, trials, excommunications,

and so forth, as matters of course among independent and original thinkers. Only in a despotism can men be stereotyped or held in political or sectarian fixedness. Mr. Tyng, Mr. Cummings, Mr. Beecher, and Mr. Swing are recent examples of inevitable changes going on in the Church to-day. The same thing is seen in politics, both in the Old World and in the New. Wise ones are not surprised at any changes which take place among men.

THE HUMOROUS CHAP-BOOKS OF SCOTLAND. By John Fraser. Part I. One vol., 12mo; pp. 156; enameled paper. Price, 50 cents. New York: Henry L. Hinton.

This book contains gleanings from the superstitions of Scotland more than a century ago. Small books containing information on various subjects were sold by chapmen or peddlers, and hence the name Chap-books. "The prefix 'chap' originally meant 'to cheap or cheapen,' as in the word 'Cheapening-Place,' meaning market-place—hence the English Cheapside and Eastcheap." This is merely an installment of a larger work on the same subject, and is very interesting, inasmuch as it contains a large amount of information about former days, and in a comparatively small space.

CROQUET. Its Principles and Rules.

By Prof. A. Rover. Thirteenth Edition. 12mo, pamphlet; pp. 75. Price 10 cents. Springfield, Mass.: Milton Bradley & Co.

We care nothing for mere games of chance, nor will we encourage them; but for games of skill, where healthful exercise is found, we have a word of hearty approval. In this croquet business there is opportunity for kindness, magnanimity, and self-denial, as well as for aspiration to excel. If one enters upon this thing with a proper spirit, good may come of it, but if it be for the exercise of selfish ambition, it had better be let alone.

LORUHAMAH. A Novel. By Virginia

Du Rant Covington, of Hernando, Mississippi. Octavo; pp. 90. Price, 50 cents. Address the Author as above.

Loruhamah is the Bible name given by Hosea to his daughter—and means, not having obtained mercy—and is the name of the heroine of Mrs. Covington's novel. According to the story, her life was one of vicissitudes; and purports to represent some phases of life in the South previous to the war. The author has evidently read much on many subjects, and some of her word-pictures are really beautiful. This is her initial book. Loruhamah was orphaned when but a babe; was adopted and cared for by a schoolmate of her mother. After the death of her foster-mother, whose husband became unkind to his foster-child, she was at length compelled through fear to marry a man she detested, and from whose house she escaped rather than be any longer subject to the treatment of one whose acts were instigated by wicked advisers, and the passions stimulated by drink. Good Dr. Lee aided her in effectually hiding from him, and

not long afterward he died, drunk, having confessed his brutal treatment of her to Mr. Stuart, who loved her but knew nothing of her history except as an upper servant or governess in the family of his sister. After many heart-trials and griefs, she accepted his loving promises, and they were married. We shall expect to hear frequently, through the press, from this spirited young writer.

THE WEATHER REVIEW for April, which has just been received from the chief signal officer, is particularly interesting. The various meteorological phenomena, as reported during the month by the many stations in the United States, were of an extraordinary character. The prevalence of excessive rains throughout the Southern and Middle States, unusual snows in New England and Colorado, high barometric pressure, river floods in Mississippi, Louisiana, and Arkansas, low temperature, and the generally backward vegetation are noted with statistical perspicuity. The maps and tables are valuable adjuncts of the *Review*.

THE HEALTH GUIDE; Aiming at a Higher Science of Life and the Life-Forces; Giving Nature's Simple and Beautiful Laws of Cure; The Science of Magnetic Manipulation; Bathing, Electricity, Food, Sleep, Exercise, Marriage, and the Treatment for One Hundred Diseases—thus Constituting a Home Doctor far Superior to Drugs. By E. D. Babbitt, M.D. One vol. 12mo; pp. 164; cloth. Price, \$1. New York: Published by the Author.

Mr. Babbitt has gathered together a mass of curious matter, under the above elaborate title; whether his claims to scientific accuracy will be confirmed, time will determine. We prefer not to sit in judgment without having made something more than a cursory examination.

MOWATT'S TEMPERANCE GLEE BOOK, No. 1. A Collection of Temperance Songs, Adapted to Popular Airs. Compiled and Edited by Alexander Mowatt. Price, 10 cents. Sold at this office.

A successful attempt to bring sound and sense together in melodious accord. It will supplant much of the "bosh" fed to some of our temperance audiences by roystering young men and boys. If space permitted, we would give the names of the songs and tunes of this new glee book, but since it costs only a dime, we commend the little book to all who would sing temperance songs.

THE DUTY OF THE CHURCH Toward the Present Temperance Movement. An Address to the New York M.E. Preachers' Meeting, by Rev. Isaac J. Lansing, Pastor of the Embury M.E. Church, Brooklyn, March 16, 1874. 12mo pamphlet; pp. 24. 15 cts. New York: National Temperance Society.

An admirable tract upon one of the most vital subjects of the day. Will the churches do their duty? or will they continue to be stumbling-blocks in the path of human progress? Mr. Lansing points the way; let halting and hesitating clergymen read, consider, and promptly follow,

THE LATE JOHN EDGAR THOMSON.

THE death of this enterprising railroad builder, director, and president, has elicited the expression of no little consideration on the part of the press at large. Related to railway matters from early manhood as a civil engineer, having had some part in most of the great railway movements of the country for upward of forty years, and having for twenty years stood at the helm of one of the most important railway corporations in the United States, his death naturally has much more than ordinary interest for the public. He was temperamentally and organically

the Pennsylvania road has become, with its main line and its numerous branches, is due in a great degree to the prudence, foresight, energy, financial ability, and scientific skill of Mr. Thomson.

Personally, as an officer controlling large bodies of men, and as a private individual, he was very highly esteemed. His bearing was courteous and refined, and his disposition kind and generous. His estate is valued at about \$2,000,000, not a very astonishing sum when it is considered how important have been his relations to great railway movements for so



a highly endowed man. Forceful and positive, yet as robust in his sense of justice and honor, and clear-headed in judgment, he possessed the elements which make up the successful business man. He was born in Delaware County, Pa., in 1808. The son of an eminent civil engineer, he embraced that profession, and early exhibited a good degree of ability, being employed in 1829 on the Philadelphia and Columbia Railroad, and subsequently on railroads North and South, until his appointment as chief engineer of the Pennsylvania Railroad in 1847. Elected in 1852 to the presidency of that railroad, he at once evinced marked capacity for developing the possibilities of railway enterprise. What

many years. As it is, however, he disposed of it, by will, as follows:

After providing for his wife, two sisters, a niece, and a nephew, the trustees are to appropriate the remainder of the net income of the estate, after the payments specified, or so much of it as may judiciously be applied thereto, to the education and maintenance of the female orphans of railway employes who may have been killed while in the discharge of their duties. Preference is to be given, first, to the orphans of employes of the Pennsylvania Railroad; second, to those of the Georgia Railroad; third, to those of the lines controlled by the Pennsylvania Railroad; fourth, to those of employes of any other railroad company in the United States.

THE PHRENOLOGICAL JOURNAL

AND

LIFE ILLUSTRATED.

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August, 1874.

[WHOLE No. 428.]



THOMAS F. HICKS.

THIS gentleman has a very active brain, with a fine-grained organization, and great susceptibility to culture and development. There is a tendency to overwork, to be too intense in mental action, and so to exhaust vitality too rapidly. He never

knows when he is tired until he finds that the machinery stops. In other words, he has more spirit and energy and earnestness than he has vital power to sustain effort.

He ought to be known for decided force of character. He has but little severity or

cruelty, but a good deal of energy and positiveness, that kind of earnestness which calls out effort, which pushes enterprises, which enables him to manifest courage in all causes which he adopts. His Combativeness, working with his strong Benevolence, leads him to take the weak side, and to work with the minority, and fight the battle of improvement, progress, and reform for the benefit of others.

He is not very selfish in money matters. He has economy rather than grasping greed of gain; is frank, open, direct in action and statement; is prudent and watchful, anxious about consequences, inclined to plan and manage with a view to safety; but he often secures safety by dash and energy. As a horse will take a heavy load through a bad place in the road, or up a steep hill, by extra spirit and exertion, so courage frequently conquers and overcomes danger by meeting it bravely.

He has dignity and a sense of his own value, and a desire to take and maintain an honorable and influential rank. He is not one that seeks for an irresponsible position, but would rather take the front of the battle, a place where responsibility and effort are specially required.

He is firm enough to earn the reputation of being obstinate, for, when he starts to accomplish anything, he feels not only bound to fulfill the duties imposed upon him, but he has an ambitious earnestness to conquer, whether it will pay or not.

His love of justice is strong, and when inspired by that principle, he is more brave and more persistent than under any other influence. He has a sensitive regard for the good and ill opinion of his friends, but a sense of duty often leads him to stem the tide of public opinion, and to act counter to the counsel of friends.

He has strong social affections; is especially popular with the little folks; the chil-

dren believe in him; pets come to him, and he has the governing power to control and influence and rule men. He is sympathetic, moved by pity in behalf of the poor, the ignorant, and the needy, and inclines to mitigate misfortune and help the helpless, and especially to protect those who have none to take their part.

He is keen in his practical judgments, quick to take account of surrounding circumstances; gathers knowledge by observation and retains it; is inclined to reason, to meditate, to study the philosophy of facts and learn their import, their origin, and their applications.

He is orderly and systematic; has good mechanical judgment, and fair business capability, but he belongs rather to the department of literature and science than to the realm of business. His organization indicates intellectual clearness and force, moral sympathy, integrity, steadfastness, prudence, dignity, ambition, social affection, energy, familiarity, and frankness of disposition.

He should cultivate his physical powers as much as may be in the open air, where sunshine and exercise may have their proper influences. He should sleep abundantly, to rest his brain and to calm and quiet his nervous system.

THOMAS F. HICKS was born in Knox Co., Ohio, May 14th, 1838. His father, who was a farmer, had a few years previously emigrated with his family from England. A man of strong natural sense and of extensive reading, he soon took a deep interest in the political and religious questions which occupied the public mind at the time of his arrival in this country, his sympathies being warmly enlisted in the leading reforms of the day, and his children received from him a strong bias in the same direction.

The education which he gave to his children was chiefly that to be obtained in the public-school; yet by cultivating in them that habit of thoughtful reading which had been his own means of self-educat-

tion, he placed them on the road to the attainment of a sound and harmonious mental development, their subsequent studious habits being supplemented in the case of most of them by the advantages of either academic or collegiate instruction.

He had one daughter and five sons. Of the latter three became ministers of the Gospel. Thomas, the youngest, early developed tastes which took him from the farm to the school-room. He divided his time between teaching and study, taking a self-selected course, at home, in high school and college, until he entered the ministry in 1862. Yet, still unsatisfied, and regarding a knowledge of the human system and of hygienic laws as the true basis of education, he supplemented with a medical course his already liberal culture.

Although chiefly occupied with pastoral work, he early became a contributor, editorially and otherwise, to various periodicals, and seems to have constantly gravitated toward the editorial chair as his true position.

The establishment of *The Wayside* in April, 1873, was therefore an undertaking for which he had long been unconsciously preparing, and he entered upon what is likely to prove his life-work with an intelligent zeal and aptitude that made success apparent from the first. Flooded though this country is with periodical literature, there nevertheless was, as there is everywhere, room for the development of a new idea, and *The Wayside*, in its special work, trespassed upon no pre-occupied ground. It possessed its own distinctive character, which was that of an independent, unsectarian paper, both tastefully arranged and cheap, both religious and entertaining, catching the eye and winning the heart of old and young. Tinted paper, elegant engravings, perfection in the typographical art—these were the garments in which beautiful thoughts were clothed, and, like a well-dressed visitor, it gained admission to many a household upon sight, and remained upon its merits.

It was, however, a seeming experiment, and would hardly have been ventured upon but for the assured financial support of others. Thus favored by circumstances, the paper has, in a little over a year, reached a regular weekly edition of ten thousand

copies. Its circulation is wide-spread, extending over the entire Union, and enlisting the sympathies of some men of much prominence, among whom may be mentioned Elihu Burritt, who, in ordering a number for distribution as tracts, expressed himself in terms of the warmest sympathy.

His views of what a Christian paper should be are thus expressed in an article entitled, "Yet there is Room:" "the press is a power. It reflects public sentiment, and yet, in many cases, also, it modifies and makes public sentiment. It is a power for good or evil, according to its quality. There is the vile press and the truly Christian press, and there are all grades between the two. The corrupt press is wonderfully prolific, and yet we would hope that the truthful press is gaining ground upon it. Certain it is that Christian literature was never so abundant nor so influential as now. But there is room for more. There is need of every voice that can plead for truth, and of every pen that can write for God. There are untilled fields of thought waiting for the shining plowshare, the precious seed, and the sower's hand. Yes, there is room enough for, and need enough of all who can speak with eloquent lip and burning word for God; and need enough that those who can write to the instruction of human minds, and the uplifting of human character, should be increased, and that these should find the press a tireless wing to bear their words to the waiting millions.

"There is need, too, that literature be not only honest and strong, but winsome, and that it should go forth adorned by all the graces of the printer's art. In short, a Christian paper should be a casket of jewels, beautiful as the diamonds that come from afar, and more to be desired than fine gold. Such literature should have every help in the way of circulation, that those who have fed on husks, and polluted themselves with the trash of the market, may have placed before them that which will attract them to better things, and kindle within them an appetite for wholesome food."

Dr. Hicks still retains his membership in the Central Ohio Conference of the Wesleyan Methodist Church, in connection with which he spent the eight years of his pastoral life.

He, however, supplied a congregational pulpit one year. His style as a preacher is calm and conversational, spiritual rather than controversial. He has a purity of thought and language, and a sincerity and directness of utterance, which give him much persuasive power, while upon occasions he rises to that impassioned earnestness which characterizes the truest oratory.

In his religious views he is orthodox and yet progressive, his exact position being best stated in his own words, which we quote: "The voice of science is the voice of nature, and we welcome all real discoveries, believing that no real *facts* contradict the revelation of the Scriptures, and that science, purified of all error and hypothesis, will be found to accord with the revelation of God in Jesus Christ."

OPPORTUNITY.

A TINY, golden gate
So deftly opened by the cunning hand
Of life's angel that no creak of softly
Turning hinge, or click of lifted latch, brings
Warning to the careless ear. In silence
The portal swings out; then the fatal key
Turns noisily on the other side. Stunned

By the hateful sound, the hurt soul whispers,
Brokenly: "Too late! too late!" yet hopes
By constant after-watch entrance to win.
But now, scarce an eye-shot from the station
Watched, the angel cuts another door;
And again the noisy key clicks doom
Into a shivering soul, hope-wrecked.

AMELIE V. PETIT.

REAL SUCCESS.

IS it because you are drawing to-day a large salary? or because you propose to leave your present situation to-morrow for a more lucrative one? Stop a moment and think: which will lead to real success in the end? You may have more to-day to spend for cigars and theater—will you have more ten years from now for business, home, wife, and children? You want the money now—you can't "cut any figure at all without it;" very true; but you will want it a great deal more by-and-by.

A man is not a fool to refuse a good offer if that offer promises nothing beyond—if it leads to no permanent, legitimate business in the end. It is the part of common sense to stay where he is, if he is acquiring a thorough and practical knowledge which will be of life-long benefit to him. Men fly about from point to point, from occupation to occupation, seeking, like the bee, for that which contains the most golden honey; but the bee is laying up for future use—the man is thinking only of the present.

The great difficulty in which young men find themselves at manhood is that they do not know how to do anything *well*. They have been in the bank, the dry-goods store, the market, the grocery, seeking with each change

an increase of salary; and now, with a slight knowledge of many things, a masterly knowledge of nothing, they look about them, uncertain where to alight, or what occupation to take up. They are as likely to succeed at one thing as another; and finally circumstances, not they themselves, make the decision. A man is generally pleased to do a thing which he knows how to do well, and at which he is making money. It is when he is unacquainted with his business; when his ignorance leads him into numberless mistakes, and the money which he expected does not come, that he feels he is on the wrong track. Now he makes a change, and the result of this attempt is no better than the first. His mistake lies too far back to be easily remedied. Real success in youth and early manhood would have been—not the largest salary, but a constant increase of knowledge in some one department, a thorough acquaintance with some legitimate line of business, which shall give him by-and-by the ability and confidence to achieve, not merely to attempt. A man is too apt to construct his life on the plan of a railroad, which brings in a large revenue at one end of the line, none at the other; while unfortunately the other end is the one which he

always desires the most prosperous. There is too much desultory, picked-up knowledge now-a-days to produce skilled, competent workmen; there are so many men who can do "Oh, anything!" so few who can do well *one* thing.

The patient, plodding endeavor necessary to secure ability and confidence is quite ignored by the great majority. While a German will spend ten to twelve years in simply *learning how*, an American youth becomes impatient over preliminaries of any sort extending beyond weeks or months, and expects in the ten or twelve years which our foreign brother has devoted to preparation to find himself on the top-most round of the ladder. Many a man, it is true, has won his way there by dexterity and courageous daring;

but again and again he has been thrust back to the foot by his more patient, plodding neighbor. Real and permanent success is seldom the result of a brilliant stroke in the game of chance; it is far more often a consequent of years of endeavor; of laborious, unflagging effort; of knowledge acquired when the boy was getting but a meager salary while he was laying the foundations of ultimate success.

J. A. WILLIS.

NOTHING teaches patience like a garden. You may go round and watch the opening bud from day to day, but it takes its own time, and you can not urge it on faster than it will. If forced, it is only torn to pieces. All the best results of a garden, like those of life, are slow, but regularly progressive.

Department of Religion and Psychology.

Know,

Without or star, or angel, for their guide,
Who worships God shall find him.—*Young's Night Thoughts.*

The soul, the mother of deep fears, of high hopes infinite;
Of glorious dreams, mysterious tears, of sleepless inner sight.—*Mrs. Hemans.*

A PARABLE OF THE KINGDOM—No. 2.

"LEVIATHAN" AND THE GREAT EASTERN.

THERE never yet was created, since the world was inhabited by man, a creature of the animal kingdom so unique in his individuality, that "on earth there is not his like." There never was living creature out of whose "mouth go burning lamps," nor out of whose nostrils "goeth smoke as out of a seething pot or cauldron," that is, continuously, and in volumes. There never were "flakes of flesh" that were "firm in themselves;" but always dependent for firmness on their relation to each other. These are some of the peculiarities that distinguish the subject from any and all forms of animal organization. Yet they are all susceptible of consistent and rational explanation by the method here proposed, and, I make bold to state, by no other.

1st and 2d. "Canst thou draw out leviathan with an hook? or his tongue with a cord which thou lettest down? Canst thou

put a hook into his nose? or bore his jaw through with a thorn?" are an allusion to an immemorial custom of taking the hippopotamus and other amphibious animals that frequent the rivers of the East, by means of hooks and cords; but so far from being a *direct* allusion to any of those animals, they are employed to contra-distinguish the subject from them, as entirely out of their sphere, and infinitely above their liabilities to capture. These interrogatives are manifestly self-negating and similar in form and spirit to: "Hast thou an arm like God, or canst thou thunder with a voice like Him?" Obviously, no. Thus at the outset is practically stated a wide difference between the creatures alluded to and the leviathan.

3d. "Will he make many supplications unto thee, will he speak soft words unto thee?" This verse is purely figurative—

yet is clearly explicable from the historic point of view. The incapacity of the great ship for the ordinary uses of merchant vessels caused her to remain, during the earlier years of her existence, in the position of a suppliant for a sphere of active usefulness. "Many," indeed, were the avenues of employment at which she "supplanted" for entrance, from all of which she was rejected as too cumbrous for adaptation. The feeble and futile efforts made by her to make friends with the pigmy enterprises of the day, so as to be employed, might well be likened to "soft words." It was as though she were endowed with speech, and said: "I know not where to go, or what to do; take me, and do with me what you will." But the mission, the purpose, was not yet apparent; and like some great bird she folded her wings, and sat silent and motionless on the sea.

Great institutions, like great characters, do not always take their proper place at once in the world's esteem. A certain President of the United States once spoke "soft words" to the powers in authority; he petitioned for employment in an humble capacity at first, but afterward rose to the head of the nation. It is in precisely the same sense that these words "will he speak soft words unto thee," are to be construed. 4th. "Will he make a covenant with thee; wilt thou take him for a servant forever?" is of the nature of that unwritten covenant whereby every and all instrumentalities of man's device or invention are contracted for without the knowledge or consent of the builders, to carry out a higher purpose than their own. There is, for instance, an unwritten and unspoken covenant between the little hive-bee and his human master, which the bee knows not, nor understands, yet unwittingly yields to its conditions, by entering the hive furnished him, and filling it with the fruit of his labors, which the master has use for that *he* knows not of. There is a universal covenant, understood only by the higher contracting parties to it, whereby the inferior orders are to serve the higher and superior orders. There are also special covenants for special purposes, of which is the covenant here spoken of. 5th. "Wilt thou play with him as with a bird, or wilt thou

bind him for thy maidens?" alludes to the custom of Eastern princes of sometimes electing a captive to the liberties and pleasures of the conqueror's court, on account of extraordinary beauty or intelligence, or of consigning him to drudgery in the service of pleasure, and is an amplification of the idea of the preceding verse; that the institutions of men are wholly at the disposal of the higher powers. 6th. "Shall the companions make a banquet of him, shall they part him among the merchants?" contains nothing vague or hard to be understood, when interpreted by the true method. It is full of historical meaning. After the gigantic enterprise of building, equipping, and working, the great ship seemed likely to prove disastrous; she was bandied about from owner to owner, in the hope that under new owners and new management, some capacity for usefulness might be developed. And it so came to pass that her interest was divided into small "parts" or shares, and these shares came to be purchased and owned exclusively by English merchants. This singular circumstance, probably unparalleled in the history of any similar institution in the world, furnishes a simple and easy solution of what otherwise must remain meaningless and obscure in the text. The other half of the proposition, "Shall the companions make a banquet of him?" is quite as fairly within the province of historical fact, though partly figurative in form. The word "companions" means simply, members of a company. After the successful launching of the big ship, the "Eastern Steam Navigation Co." deemed the event one of sufficient importance to be celebrated by a dinner. A grand "banquet" was held in honor of the occasion, which was participated in by many of the most distinguished men of the nation, and was generally commented on by the press throughout the world. This is how "the companions made a banquet of him," and how "they parted him among the merchants." 7th. "Canst thou fill his skin with barbed irons, or his head with fish spears?" It is noticeable that there is no regular order of arrangement in the description of the leviathan, peculiarity of structure and mode of operation being mingled indiscriminately throughout.

Verse 6th refers to events; verse seventh,

now under consideration, refers again to structure, or, rather, to quality, affirming the quality of invulnerability—is invulnerable, distinguished above the other inhabitants of the sea in this respect. 8th. “Lay thine hand upon him, remember the battle, do no more.” This seems an opportune moment to introduce some of the comments found in the marginal or foot-notes appended to this work. This verse is explained by our commentator to be a warning to fishermen, “remember the battle” being construed “think of the conflict that would ensue if you should attempt to take him;” and “do no more,” to mean: do no more than lay hands upon him; refrain from attempting to take him; all on the supposition that the prophet was discoursing of crocodiles, and was inspired of God to write out a code of precautions for crocodile-hunters. It would seem that their own instincts, aided by their own experience, ought to teach them all that is necessary to know about such things. What a singular thing it would be for God, through the prophet, to command a reptile-slayer to lay his hand on a serpent, and then beware of trying to slay or capture him, on account of danger; why lay hands on him at all, in such a case? It would seem that this is an unworthy construction to put upon these profound passages. In the words, “Lay thine hand upon him,” the intervention of divine providence in the affairs of men, is clearly indicated. In the affairs of nations as well as of individuals, it may be said: man’s greatest failures are God’s grandest successes. Never, perhaps, in the history of the world, has there been a more notable instance of the complete arrest of human purpose than in the case before us, of a great enterprise diverted into unforeseen ways. Her whole history is a moving illustration of the proverb “Man proposes, but God disposes.” Again, the parallel between great institutions and great characters comes up. There are men of capacity who can not discover at once their place; there is, as it were, a hand laid on them, holding and reserving their powers until a more auspicious season. It is in *this* sense that these words are to be construed.

“Remember the battle, do no more,” is not so clear of application. It is altogether probable that some things in the text refer

to things yet in the future, and that this is one of them, and not fully to be understood until the actual occurrence of the events referred to—probably refers to a period of controversy between the nations, in which the subject will act a conspicuous part. The word “battle” may have a literal meaning. In case of a general controversy between the powers of the world, the possession of this craft must become of immense importance. A vessel that could carry ten thousand troops with all necessary equipments, and that can outspeed any vessel afloat, would be no mean factor of the problem of readjustment. 9th. “Behold the hope of him is in vain; shall not one be cast down even at the sight of him?” Our commentators explain this as referring to the hope of taking him; and, indeed, it should not be wondered at that the hope of “taking” such a creature is vain; especially when one reads the context: “shall not one be cast down even at the *sight* of him?” How, then, can they “part him among the merchants;” how can they make merchandise of a creature they can not hope to possess; how could any one muster courage to lay hands on a monster so frightful of mien as to cast one down, even to look at him at a distance? It is submitted that the zoological interpretation gets sadly mixed up about this time. In the words “Behold the hope of him is in vain,” is foreshadowed the thwarting of a nation’s policy in inaugurating one of the grandest enterprises of which history gives any account. England’s secret hope was embodied in this gigantic structure, of establishing her supremacy among the powers of the world, through the dominion of the sea. She thought to surpass history and anticipate the future, in one supreme manifestation of her genius and greatness in marine architecture. That she succeeded in setting afloat the most stupendous craft that ever stirred the waters of the globe, is apparent. But that she did not succeed thereby in enhancing her political power or prestige to any considerable degree, is also apparent. Her commercial interests, which seemed to demand the construction of such a vessel, instead of being advanced, were sensibly retarded. Built ostensibly to facilitate the trade with Australia, she failed in that capacity; at the same time her con-

struction absorbed means sufficient to have built a dozen first-class merchant vessels. Financially, also, there never was a flatter failure, never being able to meet current expenses, much less make any return of first investments. So that from every salient point of view, there is a complete fulfillment of the prophecy: "Behold the hope of him is in vain." "Shall not one be cast down even at the sight of him?" needs little explanation to those who have had a sight of him. In the enormous bulk and grand proportions of the great ship, is beheld the vastness and sublimity of nature, invested with the glory and beauty of art. Such a combination is well calculated to excite emotions of awe and fear in the mind of the beholder. Suggestions of infinite power and majesty fill the mind, and cast one down into utter insignificance of self.

10th. "None is so fierce that dare stir him up; who, then, is able to stand before me?" The creature, however magnificent, is yet not the Creator, nor to be suffered to usurp His place as an object of fear. 11th. "Who hath prevented me that I should repay him; whatsoever is under the whole heaven is mine." What does the Creator owe to the creature? The institutions of men, after all their pride of achievement, are of a higher origin—is an assertion of the divine proprietorship over all the works of man. A lesson the age of great material enterprise needs above all others. An appropriate reflection to put over against the pride of power. 12th. "I will not conceal his parts, nor his power, nor his comely proportion," shows both what is *not* meant, and what *is* meant. The living dwellers in the deep are for the most part concealed, as to parts, power, and proportion. If such things as sea-serpents exist at all, they are pretty effectually concealed. Natural history gives no account of any such creature as the leviathan. The subject is distinguished from such, by dwelling and moving *on* the water, instead of under it; may be entered, parts inspected, and power estimated, and the beautiful proportions seen and admired at leisure, as has been done by hundreds of thousands — has a more extended application by means of the press. In the dawn of her notoriety, there was not a paper or

periodical on the face of the globe that did not feel obliged, as a faithful chronicler of the news of the day, to give the particulars of the structure, the "parts," the "power," and the "comely proportion" of the largest vessel in the world. These particulars became part of the public stock of curious and scientific knowledge, to an extent unparalleled in any similar instance. Colored engravings or prints of the big ship, with explanatory notes and figures, giving length, depth, breadth, power and proportion, were struck off by hundreds of thousands, and circulated everywhere, for the information of the people. All that was known, or to be seen, was made known to all. These particulars have gained as large and permanent a place in the literature of the day as those of the pyramids of Egypt. In addition to all this, on her arrival at the shores of this country, a volume was published, rehearsing interesting particulars to suit the occasion, and giving sectional engravings of the interior arrangements. This I regard as a plain fulfillment of the words: "I will not conceal his parts, nor his power, nor his comely proportion." 13th and 14th are allusions to the peculiarity of the subject as a *contrivance* instead of a *growth*; also interrogatives of the affirmative class, concerning the superiority of the subject in the power of self-defense. 15th, 16th, and 17th. "His scales are his pride; shut up together as with a close seal. One is so near to another that no air can come between them. They are joined one to another, they stick together that they can not be sundered." A very slight knowledge of animal anatomy and physiology, aided by a moment's reflection, will suffice to show that this description of the outside covering of the leviathan can not by any possibility apply to the integument of any living creature. No creature could live with his scales shut up together as with a close seal. Such an arrangement would violate a physiological law, and inevitably result in death. The main idea of dividing the bony or scaly armor of reptiles into scales or separate pieces, is to gain *mobility*, without destroying invulnerability. They do not "stick together that they can not be sundered," but are made to separate to allow water to come to the skin, and also

not to interfere with its depurating function, and may be separated or closed by muscles attached for that purpose, at the will of the animal.

The difficulty at once disappears when the mind is diverted from the *sign* to the *thing signified*. In this case, his scales of iron plates, *are* shut up together as with a close seal; they literally *stick together* that they can not be sundered; they are so close, that no air nor water can come between them. The construction of the outer surface of the great ship is a novelty in naval modeling, and one of her most distinguishing peculiarities. It was a point on which the engineer who planned her prided himself more than any other, as the safety and efficiency of the whole structure rest mainly on this new and important device. It consists of an outer and an inner skin, composed of solid iron plates, and separated from each other by a space of three feet. This intervening space, all around the vessel, is cut up into small, water-tight compartments, by small cross-plates. So that if the outer skin should be broken through, the sea would be shut up in one or more of these iron boxes, and could gain no further ingress. Covered in the ordinary manner of vessels, with her immense weight and momentum, a comparatively slight collision would crush and send her down. As it is, her safety is well-nigh absolute, far exceeding any other vessel, and all owing to the arrangement of the "scales." Well may his scales be his pride. These mainly give point and appropriateness to the poetic statement:

"Staunch and strong, a goodly vessel,
That shall laugh at all disaster,
And with wave and whirlwind wrestle."

18th, 19th, 20th, 21st. "By his neesings a light doth shine, and his eyes are like the eyelids of the morning." "Neesings" are analogous to breathings, or exhausting of waste, in smoke and flame. Eyes like the eyelids of the morning—called, in marine parlance, the "bull's eyes"—in the subject before us, of great size and number; in the night, at a distance, seem to illuminate the horizon. "Out of his mouth go burning lamps, and sparks of fire leap out." Literally, sparks of fire leap out; "burning lamps"—jets of flame from the furnace. "Out of his nostrils goeth

smoke as out of a seething pot or caldron." Some commentators liken this to the spray sent up by whales when spouting. But this is spasmodic and brief; and the context reads: "as out of a seething pot or caldron"—that is, *continuously, and in volumes*. "Smoke"—literally; "nostrils"—exhaust-pipes or funnels; smoke-stacks. "His breath kindleth coals, and a flame goeth out of his mouth." "Breath"—draughts of oxygen; "kindleth coals"—literally, "flame out of mouth"—repetition of above. 22d. "In his neck remaineth strength, and sorrow is turned into joy before him," refers approximately to the jubilee of nations held on the successful completion of the great international work of laying down the Atlantic cable; and remotely to the final and universal harmony of the human race, of which this occasion was typical and prophetic. But we are "hypocrites;" we can discern the face of the sky and the signs of the weather, but the signs of the times we can not see. 23d. "The flakes of his flesh are joined together; they are firm in themselves; they can not be moved." Of what possible use could "flakes of flesh"—that is, muscular tissue, or muscles that could "not be moved"—be to their possessor, since *motion*, voluntary and involuntary, is their most important function? Neither are they "joined together;" but play separately and independently. Neither are they "firm in themselves;" but always dependent for firmness on their relation to *each other* and to *other parts*. Yet all this description corresponds admirably to the quality of iron, as *firm in itself*. As to the thing actually intended—the flakes of his flesh *are* joined together; they *are* firm in themselves; they *can not be moved*. They are iron, steel, and copper—bolted, riveted, and welded in to a firm mass. It is a differential statement of the structure of the leviathan. 24th. "His heart is as firm as a stone; yea, as hard as a piece of the nether millstone," can not be literally construed in the case of any animal; neither has it any metaphorical meaning in that direction. It is quite probable that the ancients had some knowledge of the functions of the heart in the animal economy. They knew it to be situated near the center of the system, in a working capacity. The inspired prophet, however, had probably

never seen a steam-engine, and could choose no better figure than a "heart" in his description of the motive apparatus of the leviathan.

25th. "When he raiseth up himself the mighty are afraid; by reason of breakings they purify themselves," contains the germ of an historical circumstance. The immense weight of the great ship, while yet on the stocks, crushed her supports down into the earth. For some time, how to raise the enormous bulk was a serious problem to the best engineering talent of England. It was concluded to surround her with a cordon of engines, connected by complicated machinery, and so raise her up. After long delay and heavy expense the apparatus was adjusted, the power of a hundred powerful engines brought to bear, and the mountainous mass slowly heaved out of its bed, only to return with a crash that demolished hundreds of thousands worth of machinery. Here were "breakings" of some importance. A commission was appointed to investigate the causes of the disaster, and to devise means to further prosecute the enterprise. The investigation naturally brought to light corruption in the management. Contractors, jobbers, and others, were implicated, and the reform of the Great Eastern management became an important item in the enterprise. This was how "they purified themselves;" and that, "by reason of breakings." 26th to 29th, inclusive. "The sword of him that layeth at him can not hold; the spear, the dart, nor the habergeon. He esteemeth iron as straw, and brass as rotten wood. The arrow can not make him flee: sling-stones are turned with him into stubble. Darts are counted as stubble: he laugheth at the shaking of a spear," all contrast the subject with the living, fleshly inhabitants of the deep; and are all comprehended in the words, *iron-clad*. 30th. "Sharp stones are under him; he spreadeth sharp-pointed things on the mire." Ledges of sunken rock. On the first trip of the Eastern to the West, she ran upon a ledge of rock, at the entrance to New York harbor, that was unknown to any pilot, and tore away from ninety to one hundred feet of plating, without affecting her buoyancy or safety, owing to the principle of construction before described. "Spreadeth sharp-pointed

things on the mire" is full of significance—refers to one part of her providential mission in the world: that of laying down the submarine cables. Every telegraph wire begins and ends with a fine-drawn point. 31st. "He maketh the deep to boil like a pot; he maketh the sea like a pot of ointment." 32d. "He maketh a path to shine after him; one would think the deep to be hoary." It is noticeable, in this connection, that as birds are adapted to their element, the air, by the peculiar shape of their bodies—tapering at either extreme, so as to cleave the resisting element with the least possible displacement—so, creatures living in the water are constructed and adapted. A whale, moving through the sea at the highest possible speed, displaces no more than his bulk of water, and that so smoothly as to create a scarcely perceptible disturbance. The propelling apparatus operates *under* the water instead of on it; hence the smoothness of passage. With the leviathan it is not so. Besides being immensely greater in bulk, her propelling apparatus—consisting of two enormous wheels, not less than 160 feet each in circumference, and a powerful screw-paddle at the stern, all operating *on the surface of the water*, and driven by engines of 12,000 horse power—is amply sufficient to make the sea "boil like a pot."

An enthusiastic writer, who was on board of the Eastern on her first trip across the Atlantic, devotes a large part of his writing to a description of the vessel's action upon the sea. Far back as the eye could reach, the water was tossed in billows of milk-white foam; while, about the vessel, the sea "boiled like a pot," he says—using the identical words of the text—and, stretching away on either hand, looked like a vast snow-plain. "One would think the deep to be hoary." The same writer says that in the night a broad, luminous path shone after the ship, composed of myriad points of phosphorescent light. "He maketh a path to shine after him." 33d. "Upon earth there is not his like; who is made without fear?" There never was created a living creature so unique in his individuality that on earth there was not his like. Such a description can accord only with some extraordinary manifestation of human enterprise, as in the present instance, which well corresponds thereto. There are

other vessels on the sea, it is true; but none like this—differing as widely in structure from all other vessels as she exceeds them in magnitude. “Who is made without fear?” It was as an instrument in God’s hand the prophet saw this stupendous thing take place among the institutions of modern times. The time was, when God winked at the doings of mankind; but now, the instrumentalities of His power are become many and great on the earth, and, if iniquity rises up to the demand, may be used with awful effect for retribution. “*Who is made without fear?*”

34th. “He beholdeth all high things; he is a king over all the children of pride.” Not literally. But, chosen and reserved as an instrument of vast enterprises and high purposes, can not be used for anything common, but for great and world-wide interests. Organized on a grand scale, character and use must correspond to organization in things great and small. Is *a* king of pride; does not say *the* king. Is one of the grandest forms of the pride of human achievement on earth.

CONCLUSION AND MORAL.

The teaching of this parable sets the materialistic tendencies of the age in a different light from that in which they are commonly viewed—as contrary to the will and purpose of Deity. It teaches that all instrumentalities of man’s device or invention, however numerous or vast, have their uses in a broader and higher economy than we can comprehend. It teaches the essential proprietorship and constant superintendence of the heavenly powers over all our works. Forever and ever it says: The Invisible attends our steps, goes with us to the workshop, dives with us into the mine, sails with us over the sea, tracks us around the globe; and ever—from the low level of our own selfish and narrow ambition—snatches away the fruits of our labor, and lifts them up to the height of the divine purpose. The same power—it teaches—that sends the planets spinning on their aerial courses, builds the pin, and with His own hand fashions and wields the material instruments by which the moral destinies of mankind are shaped. It quite inverts the views of the alarmists on the tendencies of the times: that the moral government of the world is in danger of fall-

ing to pieces through too much power having been delegated to morally imperfect beings. In this view, *nothing* is delegated; all is under sovereign control. “The Lord God Omnipotent reigneth”—is its lesson; that He governs by instruments—its special application. It teaches the essential unity and harmony of scientific and religious interests. Its prophetic light shines down into our day, revealing the true relations of things temporal to things eternal. The broken and scattered lights of science, it says, now illuming here and there a dark place, are not, as the religious world is prone to look upon them, each an *ignis-fatuus* of the earth, to lead our minds astray and blind our eyes to the light of heaven; but all are sparks from the central sun—foregleams of the All-Light; that the kingdom of God on earth is one of light and knowledge, as well as peace and harmony. Let Science go on with her investigations, and Art with her applications. The Gospel will be read by gaslight as well as play-bills; its precepts fly as fast on the wings of steam as the prices current. God’s truth glides as easily and rapidly, over the electric wire, as the devil’s error. In the latter days, the kingdom was to come out of the dens and caves of the mountains, and possess the palaces and cities of the plains. It needs those temples in which to teach its truths; and those towers from which to unfurl its banners. Neither will it yield up to Satan’s empire the dominion of the sea; its servants are there. It needs, and must and will have, all the arts and appliances of the highest civilization. Christ himself retaught this parable of the kingdom by a typical act—riding into the holy city on the back of a beast—thus typifying the final subjection of the kingdom of natural forces to the kingdom of spiritual forces. Those who reject the theory of inspiration can not accept this theory of interpretation. Those who accept this theory of interpretation can not reject the inspiration of this book. A late writer for the *Christian Union* enumerates the modes of prophecy as two: judging from rational probability, and actual vision. If the former method may be fairly included in the list—and I think it may—there are at least three modes of prophecy. *Hearing*, not less than seeing, is one means of acquiring supernatural

knowledge. The Maid of Orleans proved a true prophet. Yet some of the events predicted by her were neither seen in vision nor conceived as probable; but her "voices" proclaimed them to her as coming to pass. The Bible abounds in similar instances; one of the most noted of which is the inspiration of the book under consideration—at least from

the time when God began to speak to Job out of the whirlwind until the conclusion of the forty-first chapter—by *verbal dictation*. Of the meaning of these words, the author or writer was entirely ignorant. Accordingly, in the last chapter he exclaims: "Therefore have I uttered that I understood not: things too wonderful for me, which I knew not."

H. P. SHOVE, M.D.

HYMN OF THE TEMPERANCE WOMEN.

THE light of truth is breaking—
On the mountain-tops it gleams;
Let it flash along our valleys,
Let it glitter on our streams,
Till all our land awakens
In its flush of golden beams.
Our God is marching on.
CHORUS: Glory, glory, hallelujah! etc.

With purpose strong and steady,
In the great Jehovah's name,
We rise to snatch our kindred
From the depths of woe and shame;
And the jubilee of freedom
To the slaves of sin proclaim.
Our God is marching on.

From morning's early watches
Till the setting of the sun
We will never flag nor falter
In the work we have begun—
Till the forts have all surrendered
And the victory is won.
Our God is marching on.

We wield no carnal weapon,
And we hurl no fiery dart;
But with words of love and reason
We are sure to win the heart,
And persuade the poor transgressor
To prefer the better part.
Our God is marching on.

When dawns the day of terror,
And the awful trumpet's sound
Shall waken up the sleepers
From beneath the quaking ground,
May no blood of fallen brothers
On our startled souls be found!
Our God is marching on.

Our strength is in Jehovah,
And our cause is in his care;
With Almighty arms to help us,
We have faith to do and dare,
While confiding in the promise
That the Lord will answer prayer.
Our God is marching on.

HYPNOTISM AND MESMERISM.

EDITOR PHRENOLOGICAL JOURNAL:

IN your issue for June I find an article on hypnotism, recalling the experiments of Dr. Braid, and referring the peculiar somnambulist condition known as mesmeric sleep, to the action on the nervous system of what may be styled fixedness of attention. My own experiments during the last five years have served to confirm the position taken by Dr. Braid in certain important particulars, while in other particulars they have served to discredit his conclusions. There is no doubt as to the hypnotic tendency of any fixed state of the nervous system, yet the conditions under which it occurs have considerable influence in modifying the results and in determining the number of minutes required to produce slumber.

The slow motion of a fan across the face often induces sleep in a few minutes; where, were the motion more rapid, fanning would be attended with no soporific tendency. Again, to look fixedly at an object, without winking, produces slumber; but the result may be visibly retarded, even at the last stage of drowsiness, by winking only once, even though the act is involuntary. It is clear in the latter case that all excitation of the optic nerve is suspended after a moment's persistence of the impression; for in all the experiments I have tried as to the effect of fixedness on the optic nerve, I have observed that a sense of darkness invariably invades the eye long before any cerebral result follows. I conclude, therefore, that the cerebral effect of monotony of sensation, so

far as the eye is concerned, is purely sympathetic. To exhibit the several steps of the process, the fixedness of sensation is responsible in the first place for the darkening that precedes the slumber, but only measurably for the slumber itself. At this stage a wink will restore wakefulness, and break the spell; but unless interrupted at this point the brain yields rapidly, partly in sympathy perhaps, partly from habit and association, and the patient suddenly drops into a sleep analogous to that of mesmerism.

In Dr. Braid's experiments the effect of fixedness of attention was intensified by the position of the eye, as is proved by my own experiments, conducted in the following manner: Sitting in a *fauteuil*, facing the wall of my room, and about four feet from it, and making a memorandum of the movement when the experiment was commenced, I looked fixedly at a disc of morocco having a circumference of two feet, and being on a level with the eye. I repeated the experiment seven times, with intervals of half an hour for recovery of the normal condition. The time required to produce the darkening of the eye that precurs the slumber in these cases varied very little. At the first sitting the phenomenon of darkening followed in six minutes and thirty seconds. For the remaining six the figures were as follows, in the order of trial: 6 minutes and 23 seconds, 6 minutes and 4 seconds, 6 minutes and 2 seconds, 5 minutes and 49 seconds, 5 minutes and 21 seconds, 5 minutes and 3 seconds.

On the following day, after a sound night's sleep, the experiments were resumed with discs of different colors—red, blue, green, orange, drab, black, and white—with a view to determine the influence of color, if any, in producing the result. The red disc brought on the darkening in 4 minutes and 26 seconds, though the sense of monotony was specifically less than that associated with any other color. The white stood next to the red in this respect, and induced the phenomenon in 4 minutes and 37 seconds. Orange stood next in the scale, blue next, black next, green next. The neutral and unobtrusive drab was slowest of all, and had to be employed for six minutes and 51 seconds before drowsiness supervened, and a disposition to nod answered the monotony.

I conclude from these tests that, in a general way, with some exceptions possibly, the greater the number of vibrations in a given color the sooner the effect is produced, and that fixedness of sensation is not more important than intensity in inducing the nervous state known as hypnotism.

On the third day, using the drab disc, I initiated a new series, the results of which have a more important bearing. Instead of hanging the disc on a level with the eye, I fixed it to the wall so as to compel me to lift my eyes at an angle of 45 degrees. The prodromata of hypnotism were so far accelerated by looking fixedly with the eye lifted at this angle, that the score of the six experiments stood thus: 3 minutes and 2 seconds, 3 minutes and 2 seconds, 2 minutes and 55 seconds, 2 minutes and 53 seconds, 2 minutes and 51 seconds, 2 minutes and 47 seconds. These figures I verified substantially four days in succession; then, omitting all experiments for a week to give the eyes sufficient time to recover from the habit, I verified them again.

It is quite clear from these data that the intensity of Dr. Braid's results, verging upon catalepsy, was due in a great degree to the physiological effect of rolling up the eyes at an unnatural angle, and not in the main to fixedness of impression. I have no doubt that trances similar to those of mesmerism may be induced in this way; nor have I any doubt, in opposition to Dr. Braid, that the position of the eye is a more active agent in the case than the fixedness of sensation, uniquely considered.

There are other facts that render the problem still more complex. Taking an old-fashioned spinning-wheel, about three feet in diameter, of the kind formerly used for spinning flax, I ascertained from repeated experiments that motion of a wheel at a fixed rate, while looking at it, was far more active than rest, and that this activity was augmented nearly in proportion to the rapidity of the revolutions, until such a speed was attained that the spokes were distinguishable only as successive waves of blur, while any excess of rapidity beyond this point diminished the induction. I had no means at hand for measuring the rapidity of the revolutions, but should estimate the highest in-

duction speed at thirty per minute. The wheel contained twenty spokes, which would give six hundred waves per minute. It is clear, therefore, in these phenomena, that within a certain limit vibration is more active than rest, and that the result is partly dependent upon vibrations of a certain fixed and regular rate. When too rapid, the result is retarded; when absent, the result is retarded. A rate of vibration in which the successive impulses are distinct enough to be expressed by waves of blur, represents the maximum of sleep-induction. When the separate impulses so melt together as to be semi-indistinct, the induction is diminished; when they are wholly indistinct it is scarcely greater than in a state of rest.

I am compelled to dissent from the conclusion of Dr. Braid, therefore, as to the importance of the element of fixedness of attention in this class of phenomena, and to ascribe the result in the main to successive and rhythmical waves of nervous impression, except in instances where the eye is upturned at an angle of from thirty to sixty degrees, when another important element enters into the conditions. In mesmerism, for example, I am convinced that the induction is due in a greater degree to the regular and rhythmical motion of the mesmerist's hands than to fixedness of attention. The subject of the experiment also observes this motion at an angle that tends to intensify the result; and thus far the problem is purely physiological. If now, as observation and experiment coincidentally imply, sensations are propagated from the peripheral nerves to the brain by means of vibrations, then mental impression is the equivalent in consciousness for certain vibrations of the sensory nerves, and unconsciousness or slumber is another name for a given nervous state. That all rhythmical excitation of the peripheral nerves has an important cerebral effect, has been demonstrated by so many experiments that it is scarcely necessary to rehearse them in detail. In the course of my own inquiries I have observed that to pass the ends of the fingers regularly to and fro over a piece of velvet under tension, has substantially the same effect as a regular rate of vibration applied to the eye, and will induce slumber. The same rule applies to the auditory; and I have long

suspected that anæsthetics are dependent for their effect, to some extent, at least, on an analogous excitation of the olfactory nerves. The conclusion is, therefore, that nervous impressions, constituting a series of uninterrupted repetitions of each other, are more important factors in the phenomena of mesmerism and hypnotism than is fixedness of attention, and that these phenomena, so far as they are due to the agencies employed by Dr. Braid, are purely nervous, and have no definite relation to psychology, except in so far as they involve the psychic exponents of trance, clairvoyance, and apparent subordination of the will of the subject to that of the mesmerist. The former two may occur in hypnotism; but the latter, so far as I have observed, is the exclusive property of mesmerism. It is clear, therefore, that with apparent physiological identity, there is an important point of difference between the psychic phenomena associated with the two.

The objections to attributing mesmeric phenomena to the action of magnetism or electricity, or even to an electroid agent, are to my mind prohibitive. In what manner else soever nervous impressions may be propagated, electricity is certainly not the agent of transmission. Most likely waves of molecular vibration play an important part in this activity; but at all events electricity is excluded, and there is no propriety in connecting that subtle agent with the phenomena in question. Were Mr. Cox's psychic force an established fact, it would be feasible to refer the subordination of will that occurs in mesmerism to the activity of that agent; but, as Mr. Cox's hypothesis is unverifiable, it is necessary to look further for the moving cause of phenomena verging upon the marvelous. The relation of volition to the nervous system is a problem that has some importance in this aspect of the subject, but that relation will probably long remain without definition. It is clear, however, speaking from the stand-point of physiology, that nervous energy and volition are to some extent convertible terms, but how far it is impossible to ascertain. An element of consciousness, the will, is at the same time an element of nervous organization, partakes of any perversion to which nervous organization may be subject, and is modified

and determined by it to a considerable extent. In volition, organization and consciousness meet and participate in common; it is the distinguishing activity of nervous organism, from man to the insect. Rising into reason in the former, in the latter it assumes the form of groping instinct. Its roots imbedded in nervous organization, it blossoms into intellect as it ascends the scale.

I am persuaded, indeed, that the mazy metaphysical point of view from which volition has hitherto been regarded, has tended materially to complicate the problem of what constitutes instinct, and to render inexplicable certain phenomena associated with mesmerism and somnambulism. Instinct is will determined by organization; reason is the same force, determined by consciousness. Without accepting volition as elementary to nerv-

ous organization, it is impossible to offer any satisfactory solution of many a troublesome problem in psychology, and equally impossible to offer any solution of the higher phenomena associated with mesmerism; but it is essential, as a starting-point, to disabuse the mind of the electrical and magnetic theories so long in vogue, and to re-survey the phenomena from the subtler stand-point of nervous and cerebral physiology.

Granting that there are certain phenomena in mesmerism that can not fairly be associated with hypnotism, my own observations have convinced me that the explanation is not far off, and lies in the very nature of the phenomena themselves. The agent must be sought in patient study of nervous physiology, and specifically, it seems to me, in nerve-aura as the agent of volition.

FRANCIS GERRY FAIRFIELD.

Physiognomy, or Signs of Character.

Of the soul, the body form doth take,
For soul is form, and doth the body make.—*Spenser.*

GLANCES AT FACES.

"THE wind is east, and it will rain all day," said I to myself; "no visitors in such a storm as this, and it's a splendid day for going through all my bureaux and closets." Just then the door bell rang impatiently, and presently my brother came in dripping, with a big square parcel in his arms, which he lost no time in laying on the table, exclaiming, "It is so heavy; how my arm aches!"

"What in the world is it?" said I.

"The philosophy, wit, and wisdom of Europe and America," he replied; "such a treat as we've got before us!" I drew the table toward the grate, and settled him in an easy chair, with his feet on the fender to dry; then placed the heavy parcel in his lap, and handed him a pair of scissors to cut the string that kept the thick brown paper so closely about it.

"No, I'll untie it," he said; "a string like this is not to be cut ruthlessly. Last week," he continued, "our mutual friend, Arthur

—, got back from Europe; yesterday I called on him, and he showed me these."

By this time the knot was untied, and the paper, rolled back, disclosed two magnificent photograph albums, containing two or three hundred pictures apiece. "This," said my brother, "is the American collection, and this the European," opening the latter as he spoke. "I borrowed them of Arthur to show to you. Here are nearly all the crowned heads of Europe, and her thinkers."

"They are the crowned heads," I exclaimed; "the one Jew, D'Israeli, outweighs in intellectual mint all the Guelphs in England."

"Here is Leopold of Belgium," said my brother, quietly.

"Yes, I respect him as a man and a gentleman and a king, but Palmerston, just over the leaf, is abler."

"What do you say to King William?"

"A splendid figure-head, indeed, but this intense-eyed man, whose face is seamed with

thought, and on whose faded cheek sits care, does his thinking for him. What would King William be without Bismarck?"

"I've seen an engraving of him before," said I, "and it seemed wonderful to me that a frail piece of paper, four by six inches,

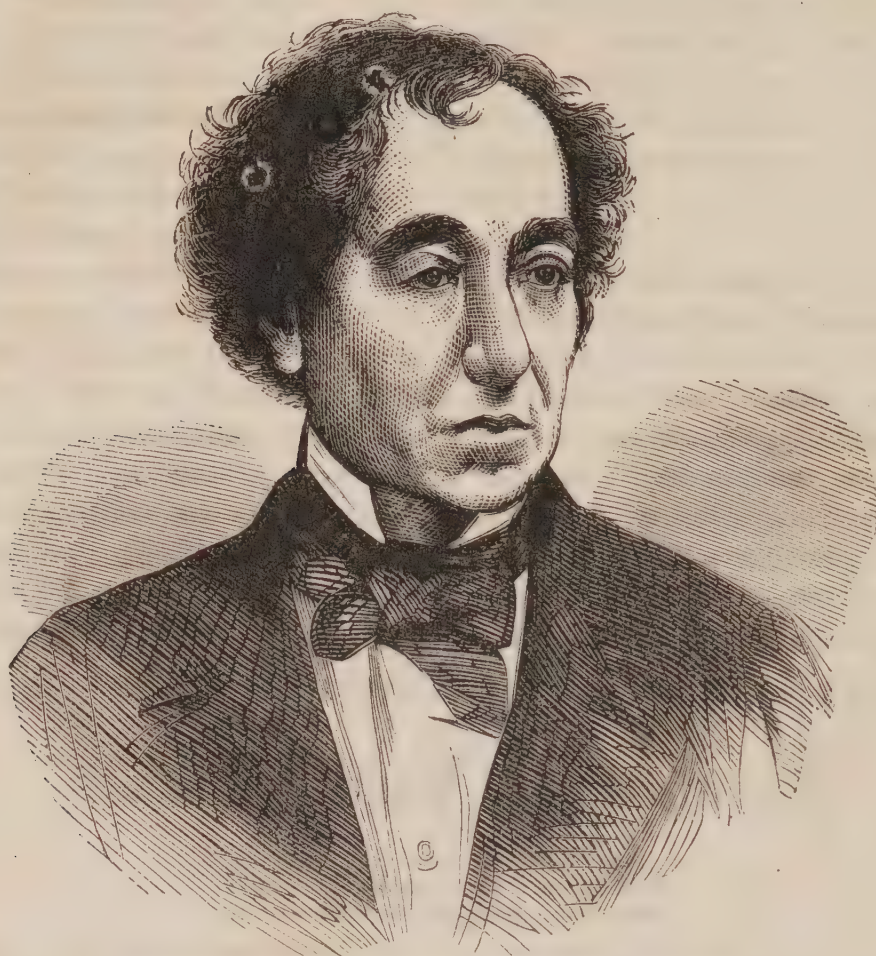


Fig. 1—BENJAMIN D'ISRAELI, PREMIER OF ENGLAND.

"Aren't a bit of a royalist, are you?"

"Yes, I am; I believe in the royalty of intelligence."



Fig. 2—PRINCE BISMARCK.

"Here, then, you have it," said my brother; "this is a photograph of a portrait of Pitt the elder."

could sustain, without destruction, such a representation of manhood — nay, of kinghood, as his picture gave."

"Are you joking?" said my brother.

"Indeed I'm not; a more imperial face I never saw. Not even that of Gustavus Adolphus, or Frederick the Great, or Julius Cæsar, could make this of Pitt take second place."

"Here are the bulwarks of English liberty that we hear so much about," said my brother, and he turned the leaf and showed the English judges, with their smooth-shaven faces, their clear eyes looking straight into the eyes of truth, and their long, curling wigs that must be so oppressive in summer time. "This," said he, "is Sir Matthew Hale, this Lord Somers, this Sir Hugh Gaines, and this Hon. Justus Lent."

"More learned and less learned than our judges," I ventured.

"How so?" said my brother.

"The constitutional history of England, with all its developments and changes and

laws for ages back, is written in their faces; what libraries of musty, dusty law books and reports and manuscripts have they patiently plodded through! But what would any of them do as financiers, as statesmen, as legislators? Our American judges have more general knowledge and ability than most of these men, but few of our jurists are such specialists as they."

"When Harvard is as old as Oxford, and Yale as Cambridge," said my brother, "American jurists will be different, certainly, from



Fig. 3—FLORENCE NIGHTINGALE.

what they are now. But here is a face that will repay study; look at it."

"Easy to study, but hard to describe; what a peculiar expression in those eyes, and what original remarks must come from the lips! that man should be a humorist."

"It is Douglas Jerrold," said my brother, "who always looks at everything through his own eyes, and has probably uttered more witticisms than any other man in Europe. The last thing from him floating through



Fig. 4—ROSA BONHEUR.

the newspapers, was a reply to a friend, who asked him if he could make a pun on the

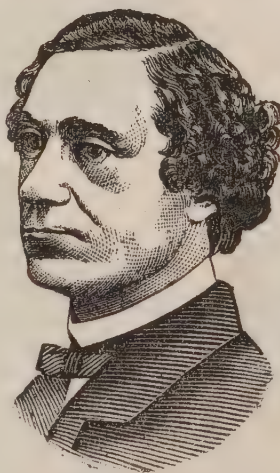
zodiac. 'By Gemini, I Cancer!' said he instantly. These funny men carry a lens in



Fig. 5—ALBERT BARNES.

their eyes that most people do not have, by means of which they make distorted images of what they see, or collect tints and expressions that escape the ordinary eye until portrayed in the language of the wit. Then everybody applauds, and wonders that so obvious connections had not been perceived before."

"Here are some pictures I like—eminent



O. B. FROTHINGHAM.



HENRY WARD BEECHER.

women; let me glance over them, and we'll discuss them afterward. Practical philanthropy in Florence Nightingale's features—not beautiful, by any means, but so full of the milk of human kindness; no wonder the Crimean soldiers called her an angel. And here is Miss Ingelow, that gifted singer, who, like the woodlark, sends from the depths of her seclusion notes so heavenly sweet that all the world grows still to listen. Ah! here is Emily Faithfull, the woman's friend, her great heart stimulating her brain to incen-

sant activity in behalf of women the world over. Her eye is clear to see what is wanted, and her hand fearless to take hold of the levers that shall bring work and women together. This modest, quiet-looking woman in the corner is Lady Baker, is it? She has been everywhere with her husband in his African explorations, and shows how woman may, in danger, in privation, in hardship and exposure, share the life of her husband without injuring in the least her feminine

performance. Rosa Bonheur, too, I guess she tells her dressmaker what and how to do. Graceful, lovely, isn't she? standing there in a plain black silk skirt, with a close-fitting velvet vest, buttoned to the throat, and a loose velvet sack, trimmed with a broad band of silk, a linen collar about her neck, and a watch-chain hanging from a side pocket. Oh, yes, I see a decoration on her breast—what is it? the cross of the Legion of Honor? Who would dream that a Ben-



Fig. 8—RALPH W. EMERSON.

delicacy. This woman with the soul-full black eyes, the rich tropical temperament, alike full of feeling and of thought, is Madame George Sand. Her nature is glowing, ardent, luxuriant. She only and Agnes Strickland are elaborately dressed; the rest look as though their clothes were made to order by a milliner, but Madame Sand devises her own costumes, and Miss Strickland seems as though gotten up for a theatrical

gal tiger is her most precious pet? The coiffure of nearly all these ladies is very simple. I guess they don't have much time to fuss over crimps and curls and rats and braids."

"Why should they?" interrupted my brother; "*they've* something *inside* their heads."

"Don't," I expostulated, "it hurts me to hear such insinuations."

"Let's take a turn through the American gallery," said my brother, "and compare the two; or, if not that, draw some lines of truth from what we may see. Pick out the leading faces as I turn the leaves."

"John Brown is one; no face like his in all the European gallery, and 'his soul is marching on;' here is Sumner, with conviction, scholarship, aristocracy, and fraternity—all curiously interwoven in his lineaments; here is jagged Thad. Stevens, and smiling Colfax; conscientious, clear-sighted Trumbull, and apostolic Albert Barnes; here is Horace Bushnell, accurate, profound thinker; and Frothingham, the polished rhetorician; his sermon last Easter was a gem of English composition, but the theology of it I could not indorse; and here is Beecher. Let us find Sidney Smith in the other book, and compare the two. Would he had lived two generations later!"



Fig. 9—EDGAR A. POE.

"He was the smile on the face of the age when he did live," said my brother; "it could not have spared him."

"But I would like to see him and Beecher together socially; what flashes of wit and humor those two would strike from each other! Here is Emerson, and beside him Edgar A. Poe. I can not conceive Emerson, so intellectual is his temperament, as really knowing the meaning of the word 'tempta-

tion;' his blood is thin and cool—but poor Poe! life was one long, incessant, varied temptation to him, and, with his quick blood, his facile temper, and his want of natural poise, he evermore yielded. Don't you think some people are born without a moral nature?" I asked.

"I believe the moral endowments of individuals are as various as their intellectual," was the reply; "we have idiots in mind and in soul, doubtless, but the improvement of ten talents is not demanded of him to whom only one was given, and just here Phrenology steps in to the relief of theology. But let us compare for a moment the women of the two nations. Here is Mrs. Stowe, Mrs. Willard, Mrs. Lozier, Charlotte Cushman, Harriett Hosmer, Miss Mitchell."

"Yet I fear we must admit that Mrs. Somerville, Mrs. Browning, and Mrs. Siddons have won higher laurels in the world of science and art than any lady American. I hope it will stimulate us to a generous emulation."

"I think," said my brother, "that an unprejudiced observer will admit that there is more fineness in the typical American than in the typical Englishman. The English are grosser, heavier, more sluggish than we; this may come of their humid climate, of their beef and port wine, or of their hereditary institutions. We live twice as fast as they do, and in twice as many ways."

"Yes," I rejoined, "and our public men die at sixty-five and less, while theirs live to ninety and over. Horace Greeley had no right to die at sixty-two. Overwork killed him; and the same is true of Chase. A great many of our journalists and writers die a decade, yes, two decades, too soon."

"Like Achilles," said my brother, "they choose a career short and glorious, in preference to one long and uneventful."

"And, unlike Achilles, few of them have a Homer to prolong their memories beyond their generation."

"We need," said my brother, "in order to compete on equal terms with our English cousins, a class of men and women who can devote themselves unreservedly to literature, to science, to art, to any specialty for which they may have an aptitude. Nine hundred and ninety-nine out of every thousand of our

college graduates enter at once, on receiving their diploma, upon some career looking toward wealth or position. The thousandth is perhaps blessed with a disposition and a fortune that enables him to continue his studies after he leaves college walls. When we have degrees in our American colleges, as have Cambridge and Oxford, that can not be taken without long, patient, and thorough

acquaintance with some one department of human knowledge, the standard of our literary men, as a class, will be raised. The necessities forced upon an American youth 'to make a living' are developing the resources of the country rapidly, and by-and-by we shall have a class to whom not pioneering work will be given, but the perfecting and polishing and embellishment of what has been carved out in the rough." L. E. L.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall!
Thou art the nurse of virtue.

THE SECRET.

"THEY call us old, dear John;
Of course, our hair is gray,
But they don't know what they say
When they call us old, dear John.
Of course, the trace of years,
Of struggles and of tears,
Is on our face, dear John;
But, sitting here apart,
With my head upon your knee,
(I'm still a child, you see,)
There gurgles in my heart
A little, happy laugh;
And I see your lip is curled
At the blindness of the world
That calls us old, dear John.

"Ah, men go far to seek
The fabled fountain, John;
They wander on and on
Till faith and courage break.
We know the secret, John;
We learned it long ago—"
("Dear wife, I love you so!")
"Of course you do, dear John:
That's what I mean to say.
'Tis love that wins the day;
And, safe within your heart,
Against the world I'm bold
To argue sweet love's part,
And say of those who love,
They never can grow old."

MRS. M. F. BUTTS.

"SIGNIFICANT DIFFERENCES OF THE SEXES."

THE *Popular Science Monthly*, for June, copies a long article from the *Fortnightly Review*, entitled: "Sex in Mind and Education," by Henry Maudsley, M.D. As Dr. Maudsley is a writer of "distinguished consideration" on subjects involving mental phenomena, and as his writings are extensively copied and highly commended by many leading newspapers, magazines, and medical journals, his opinions and reasonings can not well be ignored by the PHRENOLOGICAL JOURNAL, which has for thirty years professed to lead all the publications of the world on all subjects connected with the philosophy of mind. I propose, therefore, in behalf of the sex which is not permitted to be represented

in the columns of those periodicals that are constantly presenting the *man's* side of the argument, to show the fallacy of Dr. Maudsley's reasonings, and the absurdity of his positions, so far as they relate to sex as it is in education.

After introducing his subject in a sentence of just sixty-four words, he utters the following sentence of sixty-two words:

"Carried away by their zeal into an enthusiasm which borders on or reaches fanaticism, they seem positively to ignore the fact that there are significant differences between the sexes—arguing, in effect, as if it were nothing more than an affair of clothes; and to be resolved, in their indignation at woman's

wrongs, to refuse her the simple rights of her sex."

This is mere twaddle, or a gross blunder, or a willful perversion. There is no truth in it. The first thing for a controversialist to do is to acquaint himself with the propositions he proposes to discuss. Dr. Maudsley has misstated his opponent's position, and then proceeded to demolish his own "man of straw." The advocates for the "higher education of woman" have never raised any question in relation to the "distinctive differences" of the sexes; nor is there now any such problem in issue, unless it be in the muddled brains of Dr. Maudsley. The real question is, and always has been: "Should sex disqualify woman for receiving a higher education?"

Dr. Maudsley's third sentence is as follows: "They would do better, in the end, if they would begin by realizing the fact that the male organization is one, and the female organization another; and that, let come what may in the way of assimilation of female and male education and labor, it will not be possible to transform a woman into a man." We admit the impossibility, and inform Dr. Maudsley that the advocates of the higher education of woman *have* realized, at all times and under all circumstances, in public writings and speeches, and in private duties and relations, the important and fundamental fact that "the male organization is one, and the female organization another." Indeed, it was the full realization of this fact in the beginning that caused the "female organization" to aspire to a higher education. And I do not know of any one, "on the other side," who has proposed to abolish this interesting fact. Nor has any one, that I am aware of, suggested the "assimilation of female and male education and labor." We do not believe in the "assimilation" of the sexes. That process would certainly annihilate one, if not both. Nor would we consent to the "transformation" of a woman into a man. We would as soon have ourselves transformed into a woman—dreadful as that "impossibility" is to contemplate. Instead of any "assimilation," the advocates of a higher education for one of the sexes propose the exact equality of both, in all matters pertaining to education;

and this means, if we understand it, that each sex, having equal privileges, shall choose for itself what education it will have, instead of being dictated in the matter by the other sex.

Dr. Maudsley's fourth sentence (twenty-nine words) reads: "To the end of the chapter she will retain her special functions, and must have a special sphere of development and activity determined by the performance of those functions."

Good. We feel relieved. It is a consolation to know that woman's "special functions" are—like the excellent articles we write for the *PHRENOLOGICAL JOURNAL*, the *Science of Health*, and other progressive and reformatory journals—"to be continued." We would not have it otherwise for all the world. And *if* continued, it follows, by irresistible logic, that the "performance" of them must have "a special sphere of development and activity." But what has all this to do with the "higher education of woman?" Has anybody proposed to educate her *out* of the sphere of development and activity? We have always understood that the plan contemplated was an education that should fit her for the better performance of her special functions *in* that sphere.

The second paragraph commences: "It is quite evident that many who are foremost in their zeal for raising the education and social status of woman have not given proper consideration to the nature of her organization, and to the demands which its special functions make upon its strength."

The exact contrary is true. Every one who is "foremost" has given special attention to this special subject, and many of them have devoted twenty or thirty years to its investigation.

The third paragraph opens: "Let it be understood that the period of the real educational strain will commence about the time when, by the development of the sexual system, a great revolution takes place in the body and mind, and an extraordinary expenditure of vital energy is made, and will continue those years after puberty when, by the establishment of periodical functions, a regularly-recurring demand is made upon the resources of a constitution that is going through the final stages of its growth and development. The energy of a human body

being a definite and not inexhaustible quantity, can it bear, without injury, an excessive mental drain, as well as the natural physical drain which is so great at that time?"

Dr. Maudsley has confounded physiology and pathology, and mistaken a process of development for a "drain" of vitality. A greater blunder in the matter of vital processes is inconceivable. Dr. Maudsley assumes that sexual development in the female is at the expense of the individual life. Nothing can be more absurd. Why should sexual development be more devitalizing in the female than in the male? Why devitalizing in either? Why should the growth of the sexual organism in any living thing be any more a drain on the vital energy than the development and growth of any other part or structure?

The truth is, all the processes of development and growth are vitalizing processes. No organic function is a drain on the vitality when normally developed or normally exercised. It is only abnormal actions and conditions that expend the powers of life; all normal actions and conditions accumulate them. The normal development and growth of the sexual organism, therefore, in either sex, invigorates the whole being. Were not this so, nature would have made a sad blunder. If one organ, or set of organs, can not be developed, except at the expense or loss of

others, the arrangements of organic life are radically defective. It is a great mistake to suppose that some organs are developed at the expense of vital powers "drained" from other organs. Nature has contrived matters very differently. In her "order," the sustenance and vitality of all are drawn from the external world. No one part implies the injury of any other part, unless diseased. Food, air, water, and other hygienic agents and influences supply the materials and conditions by which all the tissues, structures, and organs are developed and replenished, equally and harmoniously.

The bodily organization of woman peculiarly fits her for the performance of her special functions without any "physical drain" whatever. She possesses more of the organic or nutritive temperament than man, which enables her more easily to nourish her own system, and supply the materials of nourishment for offspring. Hence, all the duties and responsibilities of wife and mother are just as compatible with a "higher education" as are the peculiar duties and "significant differences" of husband and father.

We need not pursue the argument further. Dr. Maudsley's assumptions being false, his conclusions must necessarily be erroneous, provided his reasoning is correct; for all logicians know that premises and conclusions must agree, whatever becomes of the facts and the arguments. R. T. TRALL, M.D.

IRISH COURTSHIPS AND WEDDINGS.

THE arrows of Cupid fly thick and fast in Ireland, and the heart of Pat seems to be especially vulnerable. According to a popular ballad, an Irishman

"Loves all that is lovely—
Loves all that he can;"

and it is, therefore, not wonderful that the love god persuades so many of the "sons of the sod," somewhat too early in life, to find their way to the altar of Hymen. Many young men in the land of the shillelagh and the shamrock marry before they are out of their "teens," and when they are not at all in a position to commence housekeeping.

"So you want to be married?" said the Rev. Mr. M—— to Peter Kinsella.

"Deed and that's just it, your riverence."

"What age are you, Peter?"

"Just eighteen past, sir."

"You're too young, Peter."

"Sure every day I'm growing older, your riverence, and it's never too soon to do right."

"How much are you able to earn?"

"Not as much as I would like, sir—only 10s. a week—but I hope things will mend."

"Why, man, you couldn't keep house on 10s. a week."

"Well, sir, Kitty is *willin' to try*."

Further expostulation was useless, and in due time the willing Kitty became Mrs. Kinsella.

In a few years the sweet prattle of children's voices was heard in Peter's cottage.

After the labors of the day, as he sat before his turf-fire with a child on each knee, and his darling Kitty sewing by his side, he used to say he was "as happy as a king." If those who have the notion that "when Poverty comes in at the door Love flies out at the window," would pay a visit to the sons and daughters of toil in Ireland, they would find how false is the saying just quoted. True, the toiler is badly paid; but he has contentment—a priceless boon; and he generally enjoys good health—another inestimable blessing. And yet it would have been better if Peter had waited a little longer before he took upon himself matrimonial responsibilities. The Irish are, however, a marrying race, and no matter how poor they may be they like to have a home of their own.

According to custom, Peter had to give a "house-warming"—that is, he had to treat his relations and neighbors to tea and whiskey-punch. The services of a fiddler were secured, and, with song and dance, the hours glided swiftly by. Peter sang his favorite song, "Did you ever hear tell of Kate Kearney?" Mrs. K. was pressed to sing, but she said she was "all through-others," and, under the circumstances, she was excused. The night's entertainment cost something, and Mr. Kinsella was a very poor man; but the custom of the country must be observed.

There is a good deal of what has been termed "fortune-hunting" in Ireland; of course there are myriads who

"Marry for love

And work for siller;"

but there, also, are a considerable number who like to get the "siller" without working; in other words, they set their hearts upon marrying a wealthy wife. They keep this object constantly before them, and when they hear that a young lady at Ballymacmurphy will likely have a "large fortune," off they start with the object of getting introduced to the favored fair one. Sometimes these fortune-hunters are greatly disappointed. One man had prowled through three or four counties in search of a wealthy wife. He was informed that Widow MacSweeny's daughter would have a "stockingfull of sovereigns," and he lost no time in becoming

acquainted with sweet Miss MacS. He was invited to Fairview, and was cordially received by the widow, who talked about bank books, railway shares, and stock, in such a way that he imagined he had at last accomplished his object. Already the "fortune" seemed in his possession. On his second visit he was taken round the farm, and his attention was particularly called to the large number of cows and sheep in the meadows. Now, as a faithful historian, I must record the fact that the stock in the field, with the exception of three cows and two sheep, had been borrowed from obliging neighbors, who were anxious to assist the widow in securing a husband for her daughter. Mrs. MacS. enlarged upon the high prices given for young cattle, and gave a glowing account of the sums realized yearly by this part of her operations alone. When they reached the house decanters and glasses were on the table in the room, and the widow, with her own hands, prepared for Mr. Verdant a rousing glass of punch. In a short time he was induced to drink another to "my daughter's health and a good husband to her." Miss MacS. blushed, of course, and was about to leave the room; she was, however, restrained by her mother, who said, "Don't be so backward, dear."

"Oh, mamma"—

"She's the best girl in the country, sir; a treasure to her mother, and it will be well for the man that gets her."

By this time, the liquor, that cause of so much ill, was telling on Mr. Verdant, and golden visions were passing before his eyes.

The widow left the room—"just to see that all's right in the cow-house."

Taking advantage of the opportunity, Mr. Verdant laid siege to Bridget's heart, and won from her a consent to their marriage.

When the widow returned she was rejoiced to hear the good news, and affectionately kissed her daughter.

"She'll be a sad loss to me, sir; but I can't stand in the way of Bridget's happiness."

"And when is the job to be finished?" asked the ardent lover.

"Oh, there's no hurry," replied Bridget.

"Just let it be whenever the young man likes," put in the wily widow. In a month

the marriage was celebrated, and, after a sumptuous repast at Fairview, the happy pair, accompanied by their friends—all on the “Irish jaunting-car”—drove to a pretty resort about six miles distant. In the village inn some pleasant hours were spent. As the shades of evening were gathering the bride and bridegroom bade the party good-by, and drove to Springvale, their future home.

Mr. Verdant’s “house-warming” was a grand affair. His friends all believed that he would receive a large fortune with his wife, and so they expected great things. They were not disappointed. Gallons of Jameson’s best were ordered, and goodies were provided for the ladies. A fiddler and a piper were engaged, and in an adjoining barn dancing was the order of the night. Indeed, the “house-warming” at Springvale, like O’Rourke’s wedding,

“Will ne’er be forgot
By those who were there
Or those who were not.”

A round of parties followed, for Mr. and Mrs. Verdant had a busy time of it responding to the invitations of those who enjoyed their hospitality at the “house-warming.”

At length Mr. V. had time to think of practical affairs, and he deemed it prudent to visit his mamma-in-law. Mounting a good horse, he was soon at Fairview, where he was cordially received and hospitably entertained. After some conversation on general matters, Mr. V. timidly said:

“You will not think it odd, Mrs. MacSweeny, if I mention the matter of Bridget’s fortune.”

“Oh, dear, not at all; Bridget will just have £50 (\$250), and I am afraid I must ask you to take it in installments.”

Mr. Verdant was speechless. He had “married in haste,” and now he must repent at leisure. At length he gave strong expression to his bitter disappointment, but Mrs. MacSweeny, cut his eloquence short by coolly adding, “I’m thinking now of getting married myself, and, of course, I must mind No. 1.”

Whether the “installments” were regularly paid I can not say; but few persons were found shedding tears over Mr. Verdant’s failure to find a “fortune.”

By the way, it is not the first time in

Ireland that both cows and sheep have been borrowed with the object of making favorable impressions; and it is also customary to borrow china, silver teapots, etc., to give an appearance of respectability to the tea-table when entertaining young men who are known to be in search of a wife. Parenthetically, I may add that cows, sheep, etc., are often borrowed by struggling farmers in order to make a good show—give an air of prosperity to the place when the land-agent is expected to visit their farms.

These fortune-hunters sometimes drive hard bargains. Farm is weighed against farm, house against house, cow against cow.

A man in the South of Ireland courted a fair girl, and at length spoke to her father on the subject of marriage.

“What fortune will you give her?” asked Mr. Tom Skinflint.

“She’ll have the farm at the mill, a horse, six cows, and £100 (\$500) to furnish a house,” replied the father.

“That’s not enough,” said Tom.

“Well, not a tenpenny piece more will I give.”

Tom saw that he had a firm gentleman to deal with, and, after thinking over the matter, he said:

“I’ll take her if you throw the litter of pigs into the bargain.”

The ten young grunTERS were promised to Tom and the matter was settled.

In the North of Ireland a young man was accepted as the future husband of an industrious girl in humble life. In a conversation with her father he asked:

“How much will you be able to give her?”

“The small farm at the cross-roads, £20 (\$100), a little furniture, and a set of china.”

“Could not you give more?”

“No. I have had a good deal of affliction, and I’m not as well off as I was. You’re getting a good wife, however, and that is better than lands or money.”

“I know she’s a good girl, and I’ll take her; but (glancing round the kitchen), I would like that *big pot*.”

The big pot was thrown in, and in a few weeks the marriage was celebrated.

In Ireland the “go-between” plays an important part in matrimonial affairs. Some-

times he is a mutual friend; at other times a wandering dealer in ladies' clothing or jewelry; and I have known the *role* to be filled by a female mendicant. The "go-between" conveys messages or carries love-letters. Indeed, ministers sometimes try their hands at match-making, and I have known some of the matches made in this way turn out very badly.

In the rural districts marriages are regarded with much interest, and if the parties newly wedded are popular, bonfires blaze from every eminence, and there are other marks of rejoicing. The people turn out in large numbers to manifest their good feeling, and it is customary for either the bridegroom or the bride's father to commission the owner of the nearest public house to supply refreshments to those who have lighted the fires and cheered so lustily.

In respectable, well-to-do society, the wedding breakfast is a grand affair; the bride's cake is cut over her head, and the toast of "the happy pair" is duly honored—among the teetotalers in pure sparkling water. Then the newly-married pair get ready for their trip, and, as they make their appearance in the hall, they are assailed right and left with a shower of old shoes and slippers. It is considered lucky to throw an old shoe after a person who is starting on an important journey. After the usual affecting leave-taking, they enter the carriage and away they go to spend their honeymoon.

Marriage in Ireland is regarded as a sacred, Heaven-appointed rite; and the beautiful island is dotted over with happy homes, basking in the sunshine of pure, God-given love! Long may Ireland be celebrated for the valor of her sons and the virtue of her daughters!

CHRISTY CRAYON.

WHAT WOMEN CAN DO.

THE statistics collected in connection with the last census furnish a great variety of both useful and interesting information. Among the especially interesting features of these statistics is that relating to female employment, reciting, in detail, the different kinds of business in which women engage, and the number engaged in each case. We are surprised by the number of employments in which women are engaged, and in some instances by the character of the work performed by many of them. For instance, who would have supposed that there were five women in this country known to be veritable steam-boiler makers, and others pursuing the vocations of bell-founders, hunters, hostlers, etc.? Here is a list showing that women have places in upward of seventy branches of industry:

Occupations.	No. employed.
Actors.....	692
Authors and Lecturers.....	115
Architects.....	1
Artificial Flower-makers.....	951
Bankers and Bakers.....	15
Bell-founders.....	4
Box-factory Operators.....	2,223
Booksellers	55
Barbers and Hair-dressers.....	1,179
Boarding-house keepers.....	7,060
Builders and Contractors.....	3
Book-finishers.....	2,729
Book-keepers in Bank, Railway, and Insurance offices	39
Carpet-makers.....	5,877
Charcoal and Lime burners.....	5

Occupations.	No. employed.
Clerks in stores.....	6,195
Cigar-makers.....	1,844
Cigar dealers.....	117
Clerks in Government employ.....	943
Commercial travelers	32
Cotton-mill workers	64,308
Designers.....	13
Domestic servants	867,354
Engravers.....	29
Farmers	22,681
Glove-makers.....	1,249
Gold and Silver workers	1,229
Hat and Cap makers	3,350
Hostlers.....	2
Hotel-keepers.....	865
Hotel employes.....	6,290
Hucksters.....	1,215
Hunters and Trappers.....	2
Inventors.....	6
Journalists	35
Knitting-mill workers	1,980
Laborers on farms	373,332
Laundresses.....	55,609
Linen-mill operators.....	444
Machinists.....	6
Mechanics not specified.....	2,559
Milliners and Dressmakers.....	90,480
Miners.....	46
Midwives.....	1,186
Nurses.....	10,170
Oil-well operators.....	1
Peddlers.....	278
Pilots	1
Photographers and Daguerreotypists.....	218
Physicians and Surgeons.....	525
Paper-mill workers.....	3,884
Printers.....	1,495
Preachers.....	67
Rubber-factory operators.....	1,851
Saleswomen.....	2,775
Sewing-machine makers	1,865
Sewing-machine operators.....	2,860
Saw-mill workers.....	35
Sculptors.....	4
Seamstresses.....	97,207
Silk-mill workers	2,393
Ship-riggers	16
Shippers and Freighters	3
Shirt-makers.....	2,812

<i>Occupations.</i>	<i>No. employed.</i>
Show-women	100
Shoemakers	9,642
Steam-boiler makers	5
Straw-workers	1,430
School-Teachers	84,047
Teachers of Music	5,580
Tailors	2,833
Traders in Groceries	1,197
Traders in Liquors and Wines	106
Workers in Tobacco factories	2,290
Workers in Woollen-mills	22,776

The facts presented go to show a wide field of employment in which women have already engaged, and it also demonstrates the capability of woman to engage in fields of labor and of business which have hitherto been generally considered beyond her reach or improper for her.

We object, however, to women working in tobacco—first, because the work is unhealthful; and secondly, because it is useless, wrong, and demoralizing. In our opinion there are more than thirty-five women journalists, and the number may be increased to hundreds with profit to women and good to the country. No mention is made above of “writers for the press,” of whom a thousand or more earn an honest living. No mention is made of phonographic reporters or shorthand writers, of whom there is a large number, nearly all being pleasantly and profitably engaged in a most useful art. They are em-

ployed on the press, in the courts, at legislatures, conventions, etc. Young ladies with fair education and abilities do well in this. There are more than four sculptors, and should be as many hundreds. Woman may rise and shine in this beautiful art. So in painting, of which no mention is made in these census tables. Why not? We have lady artists, painters of acknowledged ability. There are more woman physicians now in practice than are credited in the list, and as many more are now studying in different medical schools. Of the comparatively large number of farm laborers, we presume that blacks who work on Southern plantations are included. If half the sickly “seamstresses,” and many of the “domestic servants,” would engage in some light out-of-door work, like that of gardening or fruit-growing, of which no discriminative mention is made in the census returns, it would be vastly better for them not only in a pecuniary way, but especially in the way of health. Designing is also a pursuit in which well educated women may engage with good prospects. But besides callings named, there are many others which women may grace, and not say “by your leave,” either.

“WAS HE BORN SO?”—THE REMEDY.

MR. EDITOR—My last JOURNAL lies temptingly before me, filled with its usual feast of fat things; but before finishing its contents I would like to commune with the lady readers, especially the many mothers who, like myself, hail its coming.

After I read the sorrowful fate of poor Richard Yates, in the April number, I was strongly tempted to address you; and now a little item in the June number impels me to do so. Among the many reforms of to-day none has my more hearty approval and God-speed than the temperance reformation. I have thought often and seriously of the subject, as it behooves the mother of boys to think, and I feel that woman should exert her power to its utmost; but I think there is a more appropriate and effective way than crusading. Indeed, I do believe (and my nature is prophetic) that with woman alone rests the power to banish this curse that falls

like a blight heaviest upon her. The JOURNAL seems the most appropriate work extant in which to present my view of this subject, since you are striving for the enlightenment as well as elevation of our race. “Was he born so?” has perplexed many an aching heart and weary brain; but its solution would only awaken another query, Why was “he born so?” In tracing that brief history of fallen greatness, Richard Yates, I can not discern that he was deficient in firmness or will-power—then why was he born so? None but a highly gifted man could have delivered that impromptu temperance address, which is the very embodiment of eloquent truth, and it seems incredible that one whose convictions were so lofty, judgment so clear, and purpose so pure, could ever yield to so debasing an influence. He certainly was “impelled by a fatality that was unyielding,” and this conclusion should teach us

charity. It should also teach us wisdom—teach us to guard against *other children being born so*. A lady speaker, touching on this subject, said, "women had patched men's rents long enough." I think so myself. It is time women should drop patchwork and begin reformation in earnest; but not on dirty sidewalks, soiling their pure linen, and thus destroying the prime condition of godliness in themselves (cleanliness), nor in gilded saloons or low dram-shops, where they are drawn by their strong desire to close them, but at homes and at the polls this evil can and must be conquered. Some writers contend that its root lies in inefficient legislation; others charge it to pre-natal influence, but in either or both cases the abolition of the evil depends upon woman. Exclusive male legislation has proved to the world man's utter incompetency to cope with this desolating power, and the sooner we recognize this fact and accept the proffered aid and influence of woman, the sooner this slimy demon will cover its hydra head. Place the ballot in the hands of the thousands of women whose pride has been humbled to the very dust by the weakness, inherited it may be, and folly of those who should be dearer than life itself, and see how many moons would full and wane before her voice would become effectual in our legislative halls. In her frail hands this mighty scepter (the ballot) shall strike the final death-blow to that serpent whose coils have ever tended to drag her downward. Her voice (vote) will forbid its sale and stop its manufacture.

Most of our public men are habitual tipplers—to our shame as a nation—and indeed nearly all politicians are given to drinking intoxicants. And I have at times wondered if this were not the secret cause of their bitter resistance to woman's suffrage. They know that when she obtains the ballot they will be forced by her power to become total abstainers; so fight for their darling glass while woman strikes for the honor of her husband, her sons, and brothers. Will He who holds the scales of justice suffer the wrong to prevail? Nay! "Ever the right comes uppermost, and ever is justice done." This struggle is only prolonged by the resistance of weak-minded men who desire to en-

joy their pet vice, even by the sacrifice of every thing men should hold dear. Home, country, friends, and honor are all forgotten when the tempting cup is presented. Man is called "God's noblest work," and woman the "weaker vessel." So be it; but many a woman goes through a long life without once seeing the hour in which she could prove herself so contemptibly weak as to forfeit love, honor, pride, and position for a wild, mad, debasing habit like this.

Intemperance is certainly an inherited vice, and its victims need more tender pity than scorn, for they have been more sinned against than sinning; indeed, "the fathers have eaten sour grapes and the children's teeth are set upon edge." No amount of legislation will destroy the appetite. *Mothers alone can do that*, and vigorous legislation should sustain her.

But I know the truth and honor abiding in men if once the right chord can be struck, and, hoping some more gifted soul will strike it, I pass on to the more important, because more immediate, remedy which woman already holds in her hand, and which she should use to its utmost limit while "biding her time" for the ballot. That power which God has crowned her with for the advancement of His kingdom upon earth is known by the holy name, Motherhood.

Let every unmarried woman pledge herself to a life of celibacy sooner than become a drunkard's wife and the mother of other drunkards, thus deliberately perpetuating the curse unto the third and fourth generations. An honored maidenhood should be a million times more desirable than a dishonored wifehood. It rests with unmarried women to *make* themselves honored and revered, while the wife is compelled to share whatever of renown or opprobrium her husband brings her. In yielding her name and life to him she virtually yields before the world her individuality, and by that act oft perils all, for she is henceforth respected or degraded as he is.

Many a young maiden will exclaim, "My love will win him back." Lay not that flattering unction to your soul, my girl. Thousands as gifted and loving as you have tried it, and proved that love could not stay the maddening tide. Many a love-freighted bark

has been wrecked upon this rock of intemperance, and you may only promise yourselves failure, disaster, and disgrace.

If a man does not regard his own God-given manhood enough to abstain from that which he knows will debase and degrade him, he will neither regard pledges nor love, for "self-preservation is the *first* law of nature," and if selfish indulgence is greater in him than self-preservation, be sure he would only drag you down to shoals and quicksands.

Better your children should never be than be *born* victims to a vice for which they are not responsible, but one that will hold them slaves as long as life lasts. Better no sons

than sons whose course will keep your hearts aching, your cheeks dyed crimson, and at last bring you down to the grave in sorrow and shame.

Some little meek-eyed wren of a woman, whose sole study has been obedience and submission to a tipling husband, who has never questioned his absolute ownership of her, soul, mind, and body, will be startled by these emphatic assertions, and say I advocate rebellion. Yes, rebellion! If that is the forlorn hope, let it come speedily. I see no other hope but in quiet, dignified, persistent rebellion, or rather reservation, in one sense, and reservation in this sense means also self-preservation. H. M. L. MILLINGTON.

HOME DEPARTMENT.

BENDING THE TWIG.

ALMOST every day some anxious mother calls upon us, asking at what age phrenological examinations can be profitably made with regard to children. Some tell us they suppose the organs are not yet fully developed, and until they shall be fully developed a phrenological examination will be of no consequence.

We reply that a phrenological examination of a child is not intended to be a biographical record for persons to read in the future, as they would a biography of some great statesman; but it is intended to be, day by day, a guide for the mother in the right training and direction of her child. Just as pomologists and horticulturists prune their trees and plants, and bend and train the twigs and vines as they wish to have them grow—as some trees are cut back and compelled to grow stronger and more sturdy at the trunk and root, and are not permitted to take on top growth as much as the tree naturally inclines to do, so some children need restraining, cutting back, as it were, pruning, and holding in from impetuous, irregular effort. We have to do this for some horses; others need encouragement, or the spur, or the whip. Some children, however, are timid, and need assurance and encouragement.

It depends altogether upon what the child is, how an examination shall most effectually serve the mother, or teacher, in its training and management. Children in the same fam-

ily, inheriting from parents that differ widely in disposition, require to be treated not according to one special rule, but according to their several natures. A child that is brave, resolute, headstrong, self-willed, high-toned, and high-tempered, needs such training as is not harsh, insulting, or imperious; but he needs a firm, patient, steady, and uniform treatment; he needs to learn that the law of his parent is fixed as those of the Medes and Persians; that the word of the father is not to be doubted. And if the father is wise enough and self-possessed enough not to promise or threaten hastily, the child ought to understand that the promise or the threat will be executed to the letter. Headstrong and brave boys need the softening and mellowing influences of maternal kindness, but they need also the moral force of a bass voice, and the muscular power, which will at least be respected, and which will excite a wholesome fear. It is very easy for a person to be polite, respectful, and properly considerate to those who are strong, healthy, and efficient, but it requires more grace to be thus patient and considerate and respectful toward those who lack the power to enforce justice and protect themselves.

One child in a family will be very cautious, and timid to the last degree; will have Approbativeness so large as to be excessively sensitive to praise and censure; can not bear reproach or ridicule, and must be treated with

consideration and tenderness on that point. Rough, dogmatic treatment would break the little heart; whereas a smooth, gentle persuasiveness would awaken kindly response, would pleasantly arouse the ambition, and enable the child to do its best, confident of lenient treatment if it did not secure the highest success.

Another child in the same family, being robust, not very fine-grained, inheriting principally from the coarser parent, is plucky, positive, insensitive, and rudely tramples upon the rights of others. He can be softened by gentleness, but, as we have said, he needs to have a wholesome respect for power. Some people, even, who are grown-up men, are never thoroughly willing to be courteous, respectful, and just, unless they are in the presence of somebody who could make them sorry for discourtesy even against their will.

Another child is careless, joyous, free and easy, cares little for consequences, good, bad, or indifferent, and inclines to sing, dance, and rejoice, and is giddy, unreliable, and impetuous. Such children should have responsibilities placed in their hands, and they should be held strictly responsible, too, for their management. Nothing makes a giddy girl steady and matronly so quickly as to have the care of a child, in the absence of the mother. We have noticed how gracefully they take on a dignified, superintending appearance, and carry themselves like matrons until the mother's face comes into the house; when down goes the baby, and the pent-up jollity is given full vent.

Sitting around the same table, therefore, children inheriting from parents differing in disposition about as widely as parents well can, there may be found nearly all great contrasts of character and disposition. It sometimes happens that parents are not able to comprehend these contradictions in their children, and frequently say to us: "I do not know what I shall do with this boy," or "This girl worries the life almost out of me." A close inspection of the phrenological development of such children will place each one in its true light before the anxious parent, and give her such suggestions as to the proper management of each as shall be of great assistance in their bringing up. But if the children are left to grow, and come up without the proper training, they will be like a tree that is not pruned until it gets full-grown; it is a perfect broom, bearing no fruit, only leaves and sprouts, and it nearly kills it to take out the wood which

ought to have been taken out when it was so small as not to leave a scar on the remaining limbs.

Right training, early, persistent endeavor will mold the mind or bend the twig, and establish a character that will stand the test of temptation, and become not self-sustaining merely, but a power for good toward others. Children should be studied by parents with all the light which Phrenology and Physiology can impart, and nine-tenths of those who otherwise would go astray may be restrained, reformed, and made happy as well as useful. If parents do not understand and will not study Phrenology, they should consult the best phrenologist within their reach when the child is two, and when he is five and ten and fifteen years of age, so that his immature character may be duly restrained and guided rightly.

ENERGY.

MAN was created for usefulness in this life, and that he may perform the various duties thereof, is endowed with a mind, a will, and a capacity susceptible of cultivation. But with the learning of an Erasmus, the eloquence of a Cicero, the philosophy of a Newton, the wisdom of a Solomon, and with the capacities of all combined, he would be a naught in the world without energy. Energy is the mainspring of our being, the master-wheel of the will, the engine of all our powers.

The philosophers of the world tell us that "the young should not be stimulated to over-exertion; that the camel should not be made to carry the elephant's load," and insist "that the course often pursued by parents and teachers inspires the inexperienced to undertake more than they can accomplish, hence do them an irreparable injury by exhausting all their powers."

This we admit to be true in a certain sense; but that men and women should not be encouraged to put forth all their powers to the best advantage possible for the accomplishment of some good, we deny. Using the powers we have to the best advantage is energy, and we care not what the capacity may be, without use it is of little worth. Conceive a gun without a lock, a ship without sails, a train of cars without a locomotive, and you have a symbol of a man or woman without energy. It was this force that enabled Columbus to endure the trials incident to his eventful life, and give us this fair land. It was this that made

Alexander great, and gave him the world as a conquest; that induced Napoleon I. to face the cannon's mouth at the Bridge of Lodi and secure a safe passage over the rugged Alps; that gave courage to Fox, Luther, Melancthon, and Howard, to endure the labors necessary to accomplish their work of reformation and benevolence.

What has felled our forests, planted civilization, reared our cities, and filled them with moral, intellectual, and benevolent institutions? What has given us power to communicate ideas to the remote parts of the world with lightning speed? The answer is, Energy. Young man, if you possess this trait you may easily overcome all obstacles, and leave the world better than you found it. Energy in you, young lady, will assist you in your sphere of life, and number you among the great and good. It is the great engine of all human powers. A car may be loaded with valuable freight, but without the locomotive to convey it to the consignee, it would be of little benefit; and, in like manner, a mind filled with understanding, philosophy, and wisdom, without ability to use it, would be of little benefit to mankind. A poor ship, with good sails and fair winds, will carry some freight; but without wind and sails a good boat is useless. Hence we discern why some ordinary men achieve greatness in this life, while many with even extraordinary powers die unnoticed.

JOHN S. BENDER.

“THAT BOY DID IT.”

A BOY in the *Chicago Tribune*, says: I pity a boy. As a general thing, he is considered an unmerciful offender. If there is any mean little trick done outside of law and corn exchange offices, that is, among the smaller portion, it's “that boy” did it.

No one likes to see a lad go shuffling along the street, head down, stealing glances out from behind his ears; looking altogether as fresh as a cast-off paper collar in a black alley, or as suggestive as a wad of woman's hair on a basement window-sill. One usually makes up his mind that “that boy” is one of Providence's blue blessings to the public, and he doesn't fall far short of the truth.

But, making due allowance for the interest taken in the juvenile class of the present day, the attention paid to the rising genera-

tion, the boy, generally speaking, has to make his way up in the world at a disadvantage. He is given the simple word, unvarnished and unadorned; his manliness, his taste—and it lies not all in his mouth, as many seem to infer—his sense of honor, of politeness, is not appealed to.

A boy is sent on an errand, with the injunction to be as speedy as possible. On entering the store he finds clerks all busy with customers, and expects to wait his turn; but just as he is stepping up to make known his errand, a young lady sweeps in. For some reason or other the young clerk doesn't see the boy, and immediately begins to deal out his “lavender scent-bag” civilities to said young lady. If the boy does not make a general stampede, tread on the poodle's tail, knock little children down, step on the lady's train, tearing it half off, he waits until the final: “Is there nothing more I can have the pleasure of showing you?” Then the familiar “Well, what do you want, youngster?” sounds on his ear. Purchase made, he mopes home, knowing he is too late for supper.

In the parks, concert-rooms, street-cars, churches, he is everywhere welcome to the invitation to “get up” and “stand out of the way.”

The characters we want the future men of our country to bear we must help the boys to attain; and nothing will help them to respect themselves and others, to be kindly and agreeable generally, like treating them with deference to their wishes, and an appeal to all that is noble in them. And many a man occupying a position of influence and usefulness has often said, with tender gratitude, “All that I am, or hope to be, I owe to him, who, in my boyhood, spoke many an encouraging word, an advising word—remembering that he, too, was once a boy.”

[It is the office of the phrenologist to help make those so-called bad boys into useful men. The phrenologist may point each one to where he properly belongs, or in what line of pursuit he would do best. One would excel as a merchant, another as a mechanic, or inventor, or manufacturer, or farmer, or artist, or physician, or lawyer, or clergyman, or editor, or teacher, etc. Let each be started right, and he will make life a success. If

kicked, cuffed, and knocked about in a brutal manner, he will become what such circumstances make him. The naturally bad may be made comparatively good, and the good may be made better. Phrenology does its part in showing how.

WHAT SHALL WE DO WITH THE BOY?

MR. WELLS—*Dear Sir*: What shall we do with my brother? He is fifteen years old, and has always been a great trial at home; very willful and difficult to manage. He is attending school, but his mind is far from books, and trading is all he thinks of. He seems to have a *mania* in that direction. To-day I learned that he is trying to smoke, and am convinced it is high time *something* should be done. We live on a farm three miles from the city, but he has no natural talent for farming. His Concentrativeness is small, and he goes from one thing to another without accomplishing much. His Combativeness and Destructiveness are full; Self-esteem full, and Firmness large. He does not wish advice from parents—knows best himself.

A short time ago he went to Brighton: bought a horse for \$10 (without permission), and started for home—a distance of nearly forty miles—on horseback, *without* a saddle; sleeping over night in a barn; and being too much excited to eat or drink, he arrived home nearly exhausted, after being on the road about twenty-four hours. He is benevolent; has borrowed money to make presents. Conscientiousness and Hope are full; Cautiousness only average; Approbativeness is full. He is not very artful or frank; has fair mechanical ingenuity, great ability and propensity to copy; patterns from others, etc.; Mirthfulness is large. He is a great observer; has a strong desire to know, investigate, examine, etc. Form and Size are large; Weight and Color full. He does not keep order; allows confusion. Calculation is full. He has a great desire to travel, see places, and never gets lost. Has a clear memory of general news; can relate and imitate conversation in detail. His Language is full; at times he talks incessantly; often without *sense*, although his Casualty, Comparison, and Human Nature appear to be large. He does not have much respect for man; is often sarcastic and saucy; can be very agreeable or disagreeable, as he chooses.

Any advice you can give with regard to

his training will be very gratefully received. I am a firm believer in Phrenology, and have introduced the JOURNAL into the family. I have but two weeks more to remain at home, and wish to do all in my power for him *now*.

[This good and anxious sister says nothing of the father; it may be presumed, therefore, that the boy is fatherless and without the usual paternal restraints. It is difficult to advise what shall be done in such a case; we can only suggest that he be placed with a kind and considerate uncle; or, with a man of his own choice—providing he be approved by the family—who would be as a father to him in the way of direction, education, restraint, training, etc. The boy needs employment; he should be *fully occupied* to keep him out of mischief. Should nothing better offer, he may be placed in a naval or a military training-school, where he will be well disciplined and educated for usefulness. He is too young to be put to business or to mercantile pursuits. He needs a steady hand to direct him, and to keep him occupied.]

COURTING AND DIVORCE.—An old story contains a lesson which many married couples have not yet learned. When Jonathan Trumbull was Governor of Connecticut, a gentleman called at his house one day requesting a private interview. He said: "I have called upon a very unpleasant errand, sir, and want your advice. My wife and I do not live happily together, and I am thinking of getting a divorce. What do you advise me to do?"

The Governor sat a few moments in thought; then turning to his visitor said, "How did you treat Mrs. W. when you were courting her? and how did you feel toward her at the time of your marriage?"

Squire W. replied, "I treated her as kindly as I could, for I loved her dearly at that time."

"Well, sir," said the Governor, "go home and court her now just as you did then, and love her as when you married her. Do this in the fear of God for one year, and then tell me the result."

The Governor then said, "Let us pray."

They bowed in prayer and separated. When a year passed away, Squire W. called again to see the Governor, and said: "I have called to thank you for the good advice you gave me, and to tell you that my wife and I are as happy as when first we were married. I can not be grateful enough for your good counsel." "I am glad to hear it, Mr. W.," said the Governor, "and I hope you will continue to court your wife as long as you live."

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

COLORADO: FOR THE TOURIST AND HEALTH-SEEKER.

I WISH every invalid could for but a single week enjoy the wonderful benefit of the exhilarating air of Colorado. I can not say too much for the charm of its climate, nor tell half I ought of the power of rejuvenation one can gain from a residence in that life-giving and life-enjoying country. I have spent three successive summers there, have seen its most attractive pleasure resorts grow up from camping-places, to the possession of first-class hotels, and have witnessed the development of its new and wonderful railroads; and I confess that no portion of the United States has half the charm to me as this lovely "Gem of the Mountains." I am surprised that so few of our Eastern people, and so few of our Eastern newspapers have any adequate idea of the characteristics of this territory, so often called the "Switzerland of America;" yet most people think it expresses but the idea of scenery in the loftiest scale, but too far for them to reach. Not so; this is an erroneous idea. Never was there a more delightful ride than I enjoyed once from St. Louis to Denver, *via* the Mo. Pacific & Kansas Pacific R.R. I remember leaving St. Louis one warm, sultry evening, and, ensconced in a sleeping car, I felt almost the misery of suffocation; but just beyond the city we ascended into a more breezy elevation, and the cool, fresh air, lulled me to sleep, and before morning a blanket was necessary. In the morning sunrise I remember the grandly swelling prairies of Western Missouri, from Sedalia to Kansas City, and those neat New England houses with their green blinds, and the shade-trees and flowers in their door-yards, and the corn-fields and wheat-fields sweeping down almost to the garden fence. Ah, this was the farmer's Utopia of rural beauty! Then riding up the Valley of the Kaw to Salina, how delicious that glorious sunlight! (they say in Kansas the sun shines 300 days out of every 365, and the spring,

summer, and autumn seasons are a perfect blaze of light), and then the steady, ascending grade of ten feet to the mile, carries one up, up, into purer and more rarified atmosphere; the spirits rise, and the disposition glows. Every one is genial, the mind acts quickly, and looks upon the bright side, and as we steadily approach the Rocky Mountains and behold their snowy summits, the enthusiasm of the traveler is wrought up to the highest pitch. I remember on one train of cars of the Kansas Pacific R.R., when the news ran through the train, "*Rockies in sight!*" that every window was instantly opened, and a head appeared; and as I occupied a standing position on the platform of the last car, it was very laughable to look on either side, and behold a long row of heads. But it was my purpose to tell Eastern travelers how to get there, where to go, what it costs, who will be benefited, and the peculiarity of the climate.

1. *How to get there.*—From Boston, go *via* Albany, Buffalo, Chicago, Quincy, to Kansas City; thence *via* Kansas Pacific to Denver. From New York, go *via* Pennsylvania R.R. direct to St. Louis; thence *via* Missouri Pacific to Kansas City and Denver. Railroad fares are usually \$25 to St. Louis, and in the summer time excursion tickets from St. Louis to Denver, and return, can be obtained, good for 60 or 90 days, for \$50. This is about half price, as the ordinary fare is about \$48 each way. I am glad to say that the farther west the traveler goes, the better are the meals, and also the sleeping cars. There are no finer railroad accommodations than from St. Louis to Denver. The meals are uniformly 75 cents each, and the sleeping-car costs \$3 per day, or \$2 for one night. There are no special inconveniences, for I have often traveled over all the route to the West, and can truly say, any lady or invalid may take up a journey to the West, and will find the best of care and attention from the at-

tendants of the Pullman cars; they are models of good will and careful consideration.

2. *Where to go.*—Arriving in Denver, first stop at one of the best hotels. New ones are being erected so fast, it is not safe to recommend any, the last is always an improvement on the others. But the American has the largest and best custom. The traveler will need to spend several days here, to rest, before proceeding farther. The first point beyond this, is naturally to the place *par excellence*, Colorado Springs. On the way there the traveler will ride over the famous Narrow Gauge R.R. in *baby cars*, and for seventy-six miles at the base of the Rocky Mountains, with constantly changing views of the most interesting scenery. At Colorado Springs there is an abundance of hotel accommodations, although generally high-priced, the usual rates being from \$4 to \$6 per day. There is an abundance of livery conveniences for visiting all the celebrated objects of scenery in the vicinity. None should fail to visit Cheyenne Cañon, that most beautiful of all Rocky gorges, where the sides are massed rock, towering upward for 600 to 1,500 feet in the air, in the most fantastic form. At the distance of a mile from the entrance, is the loveliest of cascades, "Chianne Falls," leaping 300 feet in six different falls, from summit to the pool below. The "Garden of the Gods," so famous in guide books, the grandly picturesque beauties of Queen Cañon, Williams' Cañon, Englemann Cañon, and Ute Pass, are all too splendid to attempt mention in so short an article as this. The gem of the vicinity is Manitou. Here are the celebrated *Soda Springs*. Bring hither, fair lady, your little cup, and drink the nectar I offer, and behold the exclamation, "*Why, what a splendid glass of soda-water!*" and the fair one is in ecstasy. Yes, a never-failing fountain of purer soda-water than ever flowed from Tuft's Fountain; here bubbles its sparkling water from the rocks, the eye sparkles, and the system responds with a glow of pleasure at the draughts of nature's own liquid. Near by is a second spring overflowing its contents, and supplying freely a bath-house near. Do not omit the joy of a soda bath. It is an experience not to be forgotten. After I had duly taken my position in the bath-tub, I noticed no soap

was present. I supposed it had been forgotten, and yelled to the keeper to supply it. He replied in a tone which added to my mortification, "*Wait till you get through, and then we'll see about soap.*"

I sank back in the "healing flood," and after a time rose like a newly-made creature, with "patent outsides," and *very* comfortable *insides*. The soda bath had done more than soap, and left its effects in a glowing skin, an invigorated form, and added glow and enthusiasm. It was a bath worth more than the flowered ones of the Romans. No amount of rose-petals could distill a bath like that.

Over all rises the majestic storm-clad summit of Pike's Peak, veritably 160 miles away; and here, under its shadow, is gathered this rare combination of natural attractions of springs and scenery, making it, indeed, the Saratoga of the Far West.

Need I add that invalids come by the score, and stay and stay, happy, contented, and gaining daily in health and physical ability. When I first visited the place in 1870, there was no railroad, no colony, no hotels, nothing but bare earth; yet there were fully fifty tents and covered wagons pitched in the open camping-ground around, and sick and well were enjoying the benefit of Colorado's life-giving air and waters.

After the traveler has done with this, then let him visit Idaho Springs, which are warm sulphur, very purging, and especially valuable in diseases of the skin. Take another little Narrow Gauge R.R. from Denver, and ride up the wild, wierd, Clear Creek Cañon, the remembrance of which will linger with you to your dying day, for its grotesque scenery is indescribable, and lives adequately only in the most retentive imagination. Stay at Idaho for a week. There never was a more cozy mountain retreat, and if you are fortunate to get quarters at the Beebe House, thank fortune. Take your saddle-horse, and spend a day in riding up the grand and impressive Virginia Cañon, or on over the Chicago Lakes, where Bierstadt has immortalized his scene of the "Storms in the Rocky Mountains." Then push on to Georgetown, another lovely village, whose people are celebrated for their love of flowers, and whose window gardens, filled with se-

lections of mountain plants, are models of grace and beauty.

Was ever a grander trip than that up Gray's Peak, where a sea of snow-clad mountains, and parks of the most beautiful verdure surround us? 'Tis a vision of a lifetime. Usually the trip can be made by taking an early start at 4 A.M. from Georgetown, and reaching the top of the peak by ten o'clock, and return by three o'clock the same day. The ascent must be made in the morning, as by noon clouds gather round the summit and obscure the vision. The guide fee, with horse, is \$5.

Among the other attractions are Boulder Cañon and the Parks. These can only be seen by procuring a camping outfit, and the traveler may spend two weeks, or two months, and traverse a delightful country. A single team, with one or two persons, costs about \$10 per day. To a party of ten or twenty, the entire cost can be brought down to \$3 or \$4 per day, each. I have myself conducted the largest parties which ever entered the mountains, and the cost for two weeks was less than hotel board, and I think, frankly, the meals served by our cook were often superior.

3. The climate is dry, and very exhilarating; the elevation of Denver is about 6,400 feet, and begins where Mt. Washington ends. And yet Denver is the lowest place of the territory. In every direction the country ascends, and with each elevation comes a corresponding rarity of the atmosphere.

To all persons troubled with asthma, Colorado is the happiest country they can go to. To all afflicted with lung diseases, or con-

sumption in its incipient stages, the climate will be found exceedingly beneficial. I must however, add with candor, that to all *advanced cases*, the climate might act unfavorably. To all afflicted with nervous diseases, the atmosphere will do good, strengthening, toning, and bracing the system. To all troubled with dyspepsia, indigestion, etc., Colorado is fairly a paradise. There never was anything more to be coveted by the confirmed dyspeptic, than the unlimited reservoir of oxygenated air which sweeps down from the sides of the "Grand old Rockies." And sleep is such a luxury, and appetite is so splendid, that it seems as if life was never a burden, and to live is to have one continual blessing.

I have only to conclude with this advice, that to any person of means, \$300 or \$500 spent in a season trip to Colorado, will pay the largest dividends of comfort, pleasure, physical health, and unrestrained happiness, of any place of summer resort on the continent. If it does not, then my experience of three years, and my honor, all go for naught.

In every part of the territory are good roads, the best of comfortable hotels—even the cabins along the mountain roads are really home-like and comfortable, and occupied by people from the States. I am glad to add, that the people are thriving, industrious, and the most orderly of any that occupy our western territories. Life and property are absolutely in no danger. Traveling is easy, and an invalid may journey to Georgetown, with its 8,500 feet of elevation, as easily as to the Profile House, in the White Mountains of New England. HENRY T. WILLIAMS.

THE GRAND PACIFIC HOTEL.

WHY "Pacific," when on Lake Michigan, more than a thousand miles from the Pacific coast? Were it located in San Francisco, or anywhere on the shores of that grand ocean, there would seem to be propriety in the name. But "A rose by any other name," etc.; so we will not quarrel with the name.

We have put up, in our 50,000 miles of travel, at a number of "first-class hotels," both at home and abroad, and at many all the way from the Gulf of the St. Lawrence to

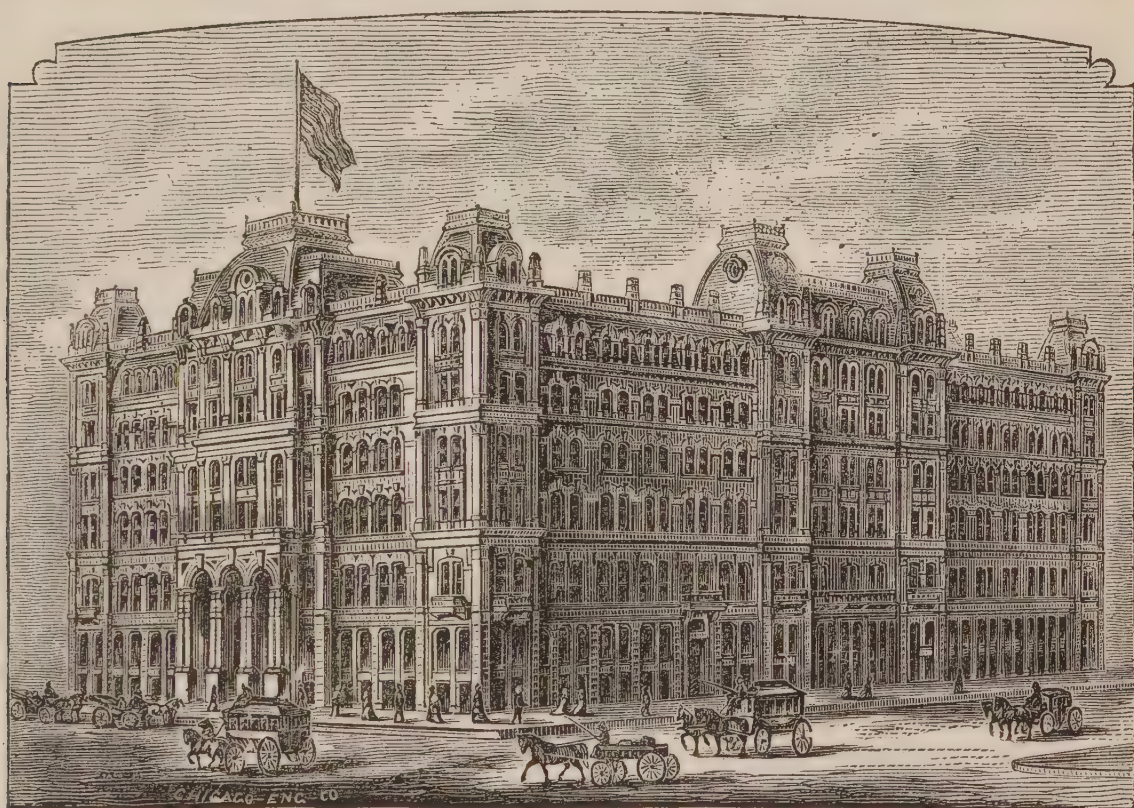
the Gulf of Mexico, and from the Atlantic to the Pacific; and though we accord to New York, Philadelphia, Boston, Washington, San Francisco, New Orleans, and Mobile, in the time of Darling and the Battle House, some credit for good hotels, we must accord the palm of perfection in hotel-keeping to the Grand Pacific in Chicago. The engraving shows the outline of this great structure, which covers an entire square of ground. Let us present a few facts concerning its architecture and arrangement.

The building is of stone, of a mixed style of architecture, six stories and basement in height, is massive, symmetrical, and graceful in appearance, a monument of solidity, and one of the greatest ornaments of rebuilt Chicago. It is 325 by 186 feet, and covers the entire space surrounded by Jackson, Clark, Quincy, and La Salle streets. There are main entrances on La Salle, Jackson, and Clark streets. Near the Jackson Street entrance, used for the arrival and departure of guests, is the superb passenger elevator, manufactured and erected by the Tuft's Elevator Works, Boston, the largest ever made for any hotel, which makes it so easy for a

news-stand, stationery, etc. There are elegant stores on the Clark Street side, and 22 offices on La Salle Street.

SOME STATISTICS.

There were used in the construction 35,000 square feet of dimension stone, 30,000 square feet of rubble stone, 7,000,000 bricks, 8,000 yards of sand, 1,100 barrels of cement, 10,000 barrels of lime, 12,000 cubic feet of limestone, 40,000 cubic feet of sandstone, 2,625,500 square feet of timber, joists, rafters, etc., 426,000 square feet of pine flooring, 52,000 square feet of walnut and maple flooring. There are 73,000 lineal feet of door and window casings, 237,000 square feet of inside



THE GRAND PACIFIC HOTEL, CHICAGO.

tired traveler to go up to his rest or down to his dinner. On the La Salle Street side there is a grand exchange, 100 by 60 feet on the first story, and on Clark Street is a grand court, 70 by 70 feet, in which is the office, so arranged that the room-clerk has a commanding view of every entrance. Six watchmen are constantly on duty, controlled from the main office by four miles of telegraph wire, connecting with a dial on the great electric clock, the first perfect development of Prof. Hamblet's Electric Signal System. No one can enter unobserved. On the Jackson Street side the barber shop and reading-rooms are situated. On the Clark Street side are the

blinds and shutters, 930 windows, 1,070 doors, 170 bath-tubs—oh, what a luxury!—211 water-closets, 2 marble drinking fountains, 33,530 feet of gas-pipe; the gas fixtures include 426 chandeliers, employing 1,518 burners, and 880 bracket lights, employing 1,180 burners. There are 2,000 feet of speaking tubes, 28 mouth-pieces, 42 miles of wire, 525 fire-alarm bells, and 7 annunciators, containing 474 indicators. There are 152,000 yards of plastering, and 1,500,000 lath. Of marble tile flooring there are 22,500 square feet, and of slate tile floor 7,500 square feet. There are 420 marble mantels and grates, 8,500 square feet of polished plate-glass, one

24-foot range with cooking utensils, one centrifugal wringer, 2 mangles, and six washing-machines. There are 11,445 square feet of sidewalks, 1,821 square feet of area platforms, and 1,071 lineal feet of steps. In round figures the cost of the building may be placed at \$1,200,000, the value of the ground (leasehold) is \$600,000, and the cost of furniture will be from \$400,000 to \$450,000.

So far as possible, every precaution has been taken to render the structure, if not absolutely fire-proof, at least safe from any fear of extensive fire within or without. Messrs. George W. Gage and John A. Rice, experienced men in the business, have a lease for twenty years, and will not permit themselves to be surpassed in the excellency of any and every department of this finest of American hotels.

EARL RUSSELL AND THE WASHINGTON TREATY.

WE find the following paragraphs in our exchange newspapers:

To the Editor of the London Times:

SIR: As I appear to have been heard but very indistinctly by your reporter in the House of Lords, I wish to inform you that what I said of the negotiations on the Treaty of Washington was that in those proceedings our Government "had tarnished the national honor, lowered the national character, and sacrificed the national interest."

I send you Baron Hubner's report of the impressions of the "great public" in the United States. Your obedient servant, RUSSELL.

Pembroke Lodge, Richmond Park, May 5.

"According to the sense of the great public, the Convention of Washington is, on the part of the English Government, an act of deference, the acknowledgment of the superiority of the forces of the United States. England has submitted, she has capitulated. Neither more nor less. If this erroneous interpretation spreads itself in the Union, and takes root in the convictions of the masses, the conciliatory dispositions which animated the British negotiators are evidently ill-understood, and the treaty, while removing existing difficulties, will have prepared men's minds for future complications."

All right. But who's to blame? Who was it but this same petulant, meddlesome Russell, who, instead of minding his own business in the interest of peace, made haste to acknowledge the late Southern Confederacy belligerent rights, thereby making it lawful for them to burn our ships—innocent merchantmen — at sea, and to obtain war supplies, rams, etc., at British ports? Who

was it that permitted the "Alabama" to escape from Liverpool, and then, with British seamen, British guns, and British sympathy, to prolong our war at a cost of thousands of lives and millions of treasure? Let "Mi Lud John Russell" answer. There is good reason for *him* to fear America, for *he* has *wronged* her. When *he* shows penitence, and begs pardon, we will forgive him; but he must not do it again. It is such peevish, nervous, fidgetty spirits as his which cause international quarrels, and the sooner they are superseded by better men the sooner will prospects for peace and neighborly kindness be established.

It was this same Russell who "had tarnished the national honor, lowered the national character, and sacrificed the national interest" in the very beginning of our domestic difficulties, in which Britain thought to profit. Can we forget this? Do we love our enemies? Not much. We accepted the \$15,000,000 award in settlement for damages which the civilized world said was our due. But, if Lord John is not satisfied, let him move to have the question re-opened. He may find it still more expensive to continue the suit. We repeat the question, Who's to blame?

COST OF OUR GOVERNMENT.—The *Tribune* compiles from the Reports in the Treasury Department the following figures, showing how enormously expensive our Government is becoming under what seems to be very incompetent or dishonest management:

Year.	Indians.	Post-Office.	Miscellaneous.
1866....	\$3,300,000	\$15,400,000	\$40,600,000
1867....	4,600,000	19,200,000	51,100,000
1868....	4,100,000	22,700,000	53,000,000
1869....	7,000,000	23,700,000	56,500,000
1870....	3,400,000	24,000,000	53,200,000
1871....	7,400,000	24,400,000	60,500,000
1872....	7,100,000	26,700,000	61,000,000
1873....	8,000,000	27,100,000	73,300,000
1840....	2,300,000	4,700,000	6,000,000
1850....	1,700,000	5,200,000	16,000,000
1860....	3,000,000	19,200,000	28,000,000

[Supposing we turn out, or, rather, weed out, the costly and merely ornamental figure-heads which are so expensive, and put honest, intelligent workers where they may be needed to manage our public affairs? Why not temperate, religious men? Supposing the clergy lend their moral support toward weeding out rogues, and putting in good men in all places of public trust?]

Department of Physiology—Our Sanitarium.

Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

"MORBID IMPULSES."

THE regular monthly meeting of the New York Medico-Legal Society was held May 29th, at the lecture room of the College of Physicians and Surgeons. Mr. Clark Bell, the president of the society, occupied the chair, and George W. Wells, M.D., acted as secretary. The paper of the evening, on "Morbid Impulse," was read by Professor William A. Hammond, and this is the report, as found in the *New York Herald*: "The lecturer began by relating several strange anecdotes illustrative of the sudden appearance of a morbid impulse in diseased minds. Morbid impulse may be defined as the condition in which a person is tempted to commit an irrational and desperate deed, which impulse may be in the mind for weeks or months. The sufferer may be unwilling to admit the presence of any such thoughts until the demon seems to gain control of him. Morbid impulses are not to be confused with epileptic cases. In true morbid impulse the person is perfectly aware of the deed he is about to commit. He acts deliberately, and if his purpose may be thwarted by circumstances, returns to the scheme. Several instances were related by the lecturer in which mothers had been seized with an impulse to kill their children. A young man in this city consulted the lecturer only a few days since, stating that he had been actuated by a terrible impulse to kill a friend. He admitted to the lecturer that he would have been guilty of the most premeditated murder. A few years ago a young man was arrested in this city for stealing women's shoes. He admitted that he had no use for them and attached no value to them, but merely stole them for the gratification of a morbid impulse. The murder of the organ-grinder by Waltz is a very recent example of morbid impulse. The jurisprudence of France is filled with examples of criminal morbid impulse. The case of Jesse Pomeroy

is worthy of notice. The victims of this boy were variously mutilated, and this boy, when arrested, admitted that he was guilty of the outrages. He was sent to the House of Correction, but there exhibited few signs of ill-temper. He was pardoned, and killed a boy only a few months since. He said that he wanted to be put where he could not do such things. [Very interesting facts, which everybody knew before. But what about the causes?] The young man who threw nitric acid on ladies' dresses in the vicinity of Union Square consulted the lecturer for treatment for the morbid impulse which he had to destroy silk dresses. I recommended a sea voyage on a sailing vessel. He returned several months after perfectly cured. [Capital for the doctor! In this he showed excellent good sense, much better than if he had prescribed the usual stimulants and drugs. Out-of-door air is good in all such cases.] Many persons who ascend to great heights are impelled to commit suicide. [In other words, they go aloft for the purpose, but should stay below. The doctor says, "such persons should never go aloft." Wise counsel!] Persons have hanged themselves from seeing ropes; others have committed suicide from seeing a revolver or a knife. The morbid impulse is nurtured by the detailed accounts of suicides and murders in the daily papers [and from even reading reports of such lectures as this?]. It is a matter susceptible of proof that one suicide by Paris green is followed by others by the same method. [Imitation large, as in monkeys.] The principles of suggestion and imitation act very powerfully upon those who are afflicted with morbid impulse. A child of six years strangled its younger brother because it had seen the Devil strangle Punch at a traveling show. Every time these morbid impulses are yielded to the inclination becomes stronger, until there is nothing but mania in.

it. Impulses to destroy things may not be the result of frenzy. The influence of the force of habit on all people can not be too strongly dwelt upon. Napoleon I. appreciated the danger of impulse among his soldiers to commit suicide, and the danger of an epidemic of the sort. He, on one occasion, made a proclamation in regard to suicide. A man who had an uncontrollable impulse to murder was cured by his doctor recommending him to be a butcher in a slaughter-house. All who are afflicted by a morbid impulse should place themselves in such a position that the commission of such

acts would be impossible." [But why doesn't the gentleman tell us something of what he may suppose to be the *causes* of these morbid impulses? Do they proceed from indigestion or dissipation? or from tea, coffee, tobacco, opium, alcoholic stimulants, or what? Now will the wise Dr. Hammond be pleased to elucidate one other point? Will he be so kind as to tell where morbid impulse leaves off, and where insanity begins? If we are not mistaken, he claims to be an expert in such things. Will he, then, enlighten the world on this point, though no "fees" shall be forthcoming?]

DOES BRAIN WORK WEAR THE BRAIN?

DR. TRALL contributed the following to the *Evening Star*, and we deem its suggestions worthy the notice of the readers of the PHRENOLOGICAL JOURNAL:

A majority of the human brains that are born do not run five years; only one-fourth part run a quarter of a century; and less than one in a hundred take a note of time for seventy years. Occasionally, however, some brain will work on and work well for more than a hundred years. Humboldt, for example, at the age of ninety-five, was working his brain as vigorously on his great "Cosmos" as he worked it seventy years before.

Now, the capacity of the brain to run and to endure is to be measured by its greatest achievement, not its shortest duration; and I am inclined to think that brain labor can not be excessive, that the brain organ knows nothing of fatigue, wear and tear, exhaustion, etc., which are so frequently ascribed to it by "hard thinking" persons. Indeed, I regard the whole hue and cry about overworked brains, excessive mental activity, too much head for the body, etc., as veritable humbug.

The brain is a mass of nervous convolutions, soft, pulpy, exceedingly mobile, and composed of more than seven-eighths water. Its molecules really float in water, so as to have the greatest possible freedom of motion with no appreciable friction. A million drops of water might be placed in a vessel and shaken up and tumbled against each other forever, without the least friction or wear, as in the case with the drops whose aggregate constitutes the ever-rolling ocean. The brain is nearly exempt from abrading friction. And the organ of mind should be so.

Moreover, the brain has nothing to do with constructing and repairing the vital machinery. It has no supplying nor depurating functions, hence is not liable to obstructions, as are all of the merely vital organs. It is simply the organ of external relations. Its function is simply the recognition of actual subjects, this recognition being manifested in thought and feeling, or intelligence and affection.

Through the nervous cords—its telegraphic channels—the mind transmits its influence to the muscles, thus inducing all voluntary motions. The mind recognizes objects through the media of the senses—seeing, hearing, smelling, tasting, and feeling. Is it hard work to see, hear, etc.? No; the brain never tires. But all parts of the living body, except the overworked or underworked brain, may be otherwise misused and abused or destroyed.

Brains are especially protected from friction by their semi-fluidity, and from adverse external influences by a bony wall. There is no inlet except through the nerves, and no way to hurt them except by mechanical injuries from without or bad blood from within. If the body is well cared for, the brain will run regularly and keep good time till the last breath. There are living to-day men and women who at four-score years are wielding their pens as easily, and perhaps more effectively, than they did fifty years ago. Witness William Cullen Bryant and Sarah J. Hale.

Those who perform much brain labor, and die young, do not damage their brains. They only destroy their bodies. If they maintain the normal vital conditions, they can not hurt the brain by any amount of work it can be made to do. I have had many supposed cases of "soft-

ening of the brain" to treat, and I invariably found the difficulty to be hardening of the bowels. The nutritive channels were clogged, or the outlets of the body were obstructed; some organs were overloaded with blood, and others were deficient; hence the balance of the circulation was destroyed, and the wear and tear of the vital machinery, not of the brain, but of the supplying and depurating organs, were very great, and sometimes speedily fatal.

Show me the person who complains of mental weariness, and I will find in him a torpid

liver, obstructed kidneys, a dyspeptic stomach, constipated bowels, or an inactive skin. If the brain-worker does not sleep enough, nor exercise enough, nor eat enough, or if he eats too much, or takes improper food, his digestive organs run down, and the clock-work of the brain, having no way to reconstruct the machinery through which it receives impressions and transmits volitions and impulses, is obliged to cease work.

The moral is, in brief, keep the body in health and the brain will take care of itself, work it all you can.

FIRST YEAR'S EXPERIENCE AS A LECTURER.

[At the request of the editor, a late graduate of the New York Phrenological Institute gives an account of his first year's experiences in the public field as a lecturer, examiner, and teacher of Phrenology. Though a personal communication, it is not private, and we will share it with our JOURNAL readers.]

DEAR MR. WELLS—On the evening of the 22d of May, 1874, I closed my first year as a lecturer. It has been a year "big with importance" to me—a year of struggles and triumphs—ending more successfully than I ever dared dream it would. As you have always taken a kindly interest in my welfare, perhaps a sketch of my experience will not prove uninteresting to you.

In February, 1866, I received my first introduction to Phrenology, and my first delineation of character from a phrenologist who was then lecturing in Kentucky. He advised me to study human nature, and become a lecturer on the subject. I had little or no faith in the theory, but the advice concerning health, temperance, and habits of life was so full of practical common sense, that I soon began to follow it, and from an irritable dyspeptic became a strong and healthy man. I gave up my cigars and other intemperate and expensive habits, procured profitable employment, subscribed for the PHRENOLOGICAL JOURNAL, purchased many of your publications, and other works, and soon became deeply interested in the subject. I was traveling constantly, seeing hundreds of new faces daily, and had a grand field for the prosecution of my studies. Three years subsequent to this, I walked into your rooms, at 389 Broadway, and received another delineation of character. And can you imagine my surprise when the delineator

said, in reference to a calling, "You should become a speaker, a lecturer, or writer—are a natural physiognomist, read the character of men and women at a glance." About one year later, while in Memphis, Tenn., I sent my photograph, under an assumed name, requesting that you give a written description of the character it revealed. And in speaking of what I was best adapted to, here is what you said: "Your fine development of language, and your readiness and clearness of intellect eminently qualify you to become an easy, off-hand speaker; and if you were to study Phrenology your ready intuition and keen perception would certainly insure you success as a lecturer on human nature and as a delineator of character."

I was still skeptical, and never failed to laugh at these descriptions, and especially at the idea that I should ever become a speaker. However, I had always prided myself upon daring to investigate whatever had a semblance of truth about it, utterly regardless of the effect it might have upon me, trusting my manhood to overcome any evil influence, if evil there should be. So I continued to study and make practical observations, although warned by good, honest people, ignorant on the subject, that such a course was dangerous, and, if accepted, was bound to lead a young man into skepticism, fatality, and infidelity. I sought for the proofs of these assertions, and I failed to find them. In November, 1872, while in New York, I determined to give the matter a fourth test, and then, if advised to become a lecturer, I would give up mercantile business and enter your Institution for the lecture course. I en-

tered the examination room without any explanation, or even giving my name. And at the end of a long description, the examiner summed it up in this way: "As a speaker, a writer, an artist, or financier, you certainly would succeed splendidly; and I would advise you to make your tongue 'cut your big-ness through the world.'" Now I looked upon these tests as sufficient to convince any ordinary man who was not blinded by prejudice and ignorance, that whether the theory could lay any claims to a science or not, there was a *great deal* in it *worth knowing*. So I at once gave up my business, and entered the phrenological lecture course of that year, then opening. And here I will say that such a course of lectures is a grand feast of intelligence to any thinking mind. No other theory upon earth, yet discovered, can so forcibly impress upon the reflecting man the reality and earnestness of life, and point out to him his sphere, and the positive necessity of temperance in all things; and that life's grandest duties are the exercise of benevolence, kindness, and generosity to all mankind, and faith in the Maker of all.

Well, on the 20th of December, we of the class received the eighty-fifth and last lecture of the course, and also our diplomas. I then spent some time in hard study. On the evening of the 20th of March, 1873, I delivered my "maiden" lecture in a Quaker church—or meeting-house. Eleven months out of the fourteen that have passed since then, I have been actively engaged in the field; have visited thirty-seven towns and cities in Ohio, Indiana, Kentucky, Tennessee, and Mississippi, lecturing two hundred and fifty-five times, two hundred and eighteen of which have been delivered under the auspices of classes. I have delivered from four to twenty lectures in each place. Everywhere my classes have comprised the refined and most intellectual people of the communities in which they were formed. With two or three exceptions, my lectures have been received with earnest attention and flattering appreciation. In making an average of the attendance, I find that if each lecture had been before a new audience, I would have addressed over fifty thousand people during the year. My delineations of character have exceeded two thousand. My suc-

cess in pecuniary and other respects has exceeded my most sanguine expectations; and I hope to do much in the future for the advancement of this noble science of man. In the social circle the kindness and attention shown me by the people have been very flattering; and no lapse of time nor reverse in life can erase the memory of their acts of kindness, or cause me to forget or cease to cherish their friendship. Certainly many unpleasant things have come up during the year. Success has not sought me unasked. There have been days of weary struggle, and sleepless nights spent in anxious thought. I have been compelled to convince the thinking classes before they were ready to receive me or my subject; and to meet the objections and sneers of those who *pass* for intelligent people, yet are too narrow to investigate for themselves. The ignorant, of course, have assailed me, and the jealous and prejudiced have attacked my personal character and slandered me, but they have not harmed me. These struggles are perhaps necessary to the development of man's better strength.

The chief pleasure in success is in the triumph over opposition. When I weigh those who have sought to injure me, in comparison with the hundreds of warm hearts and friendly hands that are open to receive me wherever I have been, they are as only a "drop in the bucket"—a necessary drop of the bitter to give a higher appreciation of the sweet. Tell those who receive instruction from you, that there is no other subject with which they can so readily engage the earnest attention of the broad-minded, thinking people of the country. There is no sphere in life in which intelligent young men can find a grander field in which to develop all their manhood's higher and better powers, attain the full maturity of their mental strength, and do more good for their fellow-man. But those who desire success must not expect to reap the benefit of labor without doing work. They must learn that idleness is the most vulgar thing in the universe; and that self-sacrificing devotion to the cause, intensity of earnestness, persevering study, habits of economy, generosity and kindness, dignity and sociability, friendship and politeness to all, great firmness and courage are among the many qualities essential

to success as a lecturer. Now I would like to tell you what this grand subject has done for me, but fear I have already taken too much of your valuable time. However, I will say it has opened up a new and glorious world of thought to me, making the present

beautiful and joyous, and lighting up the future with bright promise.

Wishing you God-speed in your noble endeavors to elevate and strengthen the intellectual and moral standard of the human race, I am, as ever, yours sincerely,

R. E. MACDUFF.

SPECIMENS FOR OUR CABINET.

IN June we received a package containing skulls, bones, flint weapons, and fragments of pottery, from Mr. Thomas D'Arcy, of Wilkesbarre, Ohio. For the kindness of that gentleman, who has evinced a warm interest in the PHRENOLOGICAL JOURNAL in other ways also, we are very grateful. Accompanying the package was the following letter, descriptive of its contents:

The specimens I send would have gone sooner, but I was waiting for more; the weather, however, has been so wet that I could dig no more.

The two skulls were found in the same mound—'tis rare to find skeletons in *any* mound here—the one in the inside box I got out unbroken—seemed to be rounder than modern skulls, and has a hole in the back, as if made with a stone axe. The skeleton was lying on the face, with the head lower than the heels, as if thrown in carelessly; the other was lying across it—both subjects evidently had been killed in battle. There may be more remains in the same mound—will dig in the summer. The smallest arrow-head was found near the bodies, and is supposed to have been poisoned. The shells were near the head, and served probably as necklaces.

The large flint spear-head was dug from a stone mound, which contained some ashes. The pottery is from a burial mound, also a few teeth of some animal. The human teeth all belong to the *flat* skull, which I send as I dug it up. Why is it flat? Is it not thinner than the other and of a different shape?

This is a very hilly country, with long ridges and numberless valleys—a coal region—twenty miles north-west of the Ohio, in the neighborhood of Newark and Circleville on the Scioto, in both of which places are vast works of mound-builders. The mounds are nearly all on the ridges, seemingly in a line, east and west. They seem to be of the following kinds: 1st, Burial-mounds, where the ashes of the burned bodies lie, mingled with charcoal and broken bones (of animals?). 2d, Altars,

formed of very fine clay, baked by the sun, or fire where the bodies were burned, before being placed in the burial mound. These altars are generally found quite near (a few feet or yards) to the burial places. 3d, Small mounds on cross ridges—camp fires?—where are found a foot or two of ashes, mingled with bones. 4th, Stone mounds, of which I know of only two about here. The stones are rough, about as heavy as a strong man could lift; many smaller, and the mound is on a high hill, a mile from any water. 5th, Small mounds surrounded by a ditch and fortifications.

There are three forts here, all bordering on Coon Creek, and not more than two miles apart, two being on the east and one on the west side. One is a perfect circle, on a high hill, with a clay wall about seven feet high, with covered way to a spring and a large burial mound in the rear. The second is a small mound on a high ridge, with two semi-circular trenches in front, and breastworks flanked for a half mile on each side by (arrow?) pits—all defending a burial mound—and town?—a mile in the rear. The third, on the west side of the creek, nearly opposite No. 2, I have not seen, but I hear that it is a triangular work.

I have a rough slab of limestone, about a foot square, with holes in it as follows: Five on one side, three on the other, about an inch in diameter, and about half through the stone. What is it for? No one knows. Some suppose for grinding; also a stone of a flat, conical shape, of blue slate; perhaps a hatchet.

The ridges are covered in every direction with chippings of flint. No such flint is found nearer than Licking Co., near Newark, about sixty miles north, where are great quarries of it. How they made the arrows is a mystery. It seems as if they were made by the women and children. I send you a piece of flint, intended for a spear or large arrow-head, but left unfinished. No inscriptions of any kind are ever found here, nor is any metal ever known to have been dug from the mounds.

The mode of burial seems thus: After cre-

mation on the altar mound the ashes were placed in the burial mound, near by, in a small circular spot, with a small piece of red pigment and a few broken bones or teeth (of animals?), covered with splinters of flint and fine ashes. There may be thousands of bodies in

one mound. Though all on high ground, the mounds are not for watch fires, I am certain; for they are not on the highest points, but generally on broad dry ridges, or spots where many could see them; their huts, I think were built near them.

THOMAS D'ARCY.

Department of Literature, Science, Education.

GENESIS AND INTER-RELATION OF THE SCIENCES.

THE distinct sciences were developed from a chaotic diffusion of ideas. They so inter-oscillate as to form mutually dependent parts of nature's stupendous organism. Hence, it is obvious that what are called the medical sciences can not exist as independent entities; and hence the appeal in a former essay, and now again, for a higher professional standard, and a more thorough scientific culture of those who practice the healing art. For some of the facts I am about to advance in advocacy of my position I am obliged to Spencer and Whewell; but this acknowledgment is scarcely necessary, since as in common with all writers I am laid under obligations to all great thinkers who have lived, thought, and written, and to those who live, think, and write cotemporary with me. And this reciprocity of mental action is an example just at hand of the mutual relations of the branches of science.

There is no difference but in degree between common sense and science. The merest perception, directed by reason, is common sense; this, extended to the classification of things or relations, is science; and science, when carried to the solution of primal, universal, and immutable laws, comprehends God. The child begins to learn something of its environment before it is a week old, and by the time it can crawl and has tumbled out at the door it knows better than to try the same feat again, for it has a qualitative prevision of the result, just as the astronomer, by calculation, gets a quantitative prevision of an approaching eclipse. Thus the mind advances from qualitative to quantitative prevision, and from concrete to abstract facts, and by the aid of these effects the analysis of more complex relations re-

sulting in another order of concrete facts. So that every view of the sciences shows co-adjuvancy and their *consensus*.

With aboriginal man the classification of like things into groups grew out of necessity, as did at the next step of his advancement the grouping together of the relations of one thing to another—the first expressed his ideas of things, the latter of circumstances. Here is the germ from which science sprang. Our intellection first observes the similarity of and the differences between things; our reason classifies them, and inquires into the origin of things and the causation of circumstances. In this way all our ratiocinations proceed.

Now in pursuing classification a step further, after finding that some things are precisely alike, and that some relations are precisely alike, the idea of *equality* was conceived; and that is the starting-point or fundamental principle of mathematics. It is founded on equality and number, and proceeds by method and extension.

We find again that some things are animate, and the knowledge we have of these bodies—of their genesis, development, and phenomena—is called biology, which embraces all those branches of knowledge known as the medical sciences as well as those which concern the botanist and the naturalist. There are, too, certain delicate processes going on in nature, the prime factors of which are elements, atoms, and definite equivalents; this is chemistry. It silently permeates the material universe, and comes as a potential auxiliary to the sciences and the arts.

Again, the necessity of carrying on barter led the aborigines to apply their idea of

equality in the construction of scales, and this formed the first theorem in mechanics ; and next came the inclined plane, the screw, and the pulley, and finally the requisite knowledge to weigh a world. The association of the idea of worth or value with commodity, was the beginning of the most extensive commercial relations between nations, and was also the beginning of quantitative prevision.

Equality of definite recurring cycles of time being observed, gave rise to the first inklings of astronomy. Seeing that the moon completes all her changes from one lunation to another in about twenty-nine days, the aborigines began to foretell her coming changes. In like manner they observed that two hundred and thirty-five lunations constitute a definite recurring cycle, and that the lunar eclipses occur in each cycle in the same order. So that they advanced in quantitative prevision so far as to predict with considerable certainty each coming eclipse. So much for chronological astronomy.

Meantime geometry was cultivated, at least so far as it deals with right angles and direct measurement. Proceeding on the idea of equality as applied to the shadows of a perpendicular stick or post, called a gnomon, and from the relation of the shadow and the sun for a succession of days and years, the periods of the solstices were ascertained. A step further in geometry, and Berosus conceived the hemisphere, and soon after came the armil, the quadrant, and the astrolabe. Finally Hipparchus, the father of trigonometry, explained the irregular movements of the celestial bodies by stating that they revolved in circles, and that the earth is not in the center of their orbits ; but he thought it probable that they all revolve round our globe. This much for geometrical astronomy.

Galileo led the way to physical astronomy. By his researches into dynamics he found that the essential principle—uniform force—generates equal velocities in equal successive times. He proved the uniform action of gravity by showing that the force and the velocity of an ascending body are just equal to the force and velocity of its descent, and that a body projected horizontally will have a uniform motion onward and a uniformly

accelerated motion downward. The way being thus prepared, Newton brought geometry to bear, and correctly demonstrated the movements of the celestial bodies.

The aid thus given to astronomy by geometry and mechanics powerfully developed all those departments of knowledge. With this advance came the "calculus," and finally the "principia," and the elucidation of some of the most important theorems of mechanics. We see in this how common sense, as exercised in the common affairs of life, developed from crude ideas to more accurate and extensive knowledge—from qualitative to quantitative prevision—from the mere judgment of the senses to the profound and marvelous revelations of science ; and then how the various departments of knowledge mutually develop each other.

For instance, from equality came the idea of duality ; from duality came number ; from number came numeration. The mental processes by which the relations of numbers are expressed were at first conducted by counting familiar objects, as the fingers, and the number to be expressed symbolized by a corresponding number of fingers, as mutes and wild Indians do now. As the process of calculation advanced, came arithmetic, next geometry, and finally algebra. In the last mentioned mode symbols indicate the relations between numbers, just as the other modes, being more concrete, express the relations between entities.

From Galileo's conception of uniform force and compound motion Newton was led to suggest the law of gravitation, but could not demonstrate it till Picart calculated the length of a degree on the earth's surface. By geometry the relations of terrestrial bodies were determined, and then the relations and velocities of celestial bodies were calculated. Newton's calculation of the velocity of sound was wrong till Laplace corrected it by showing that the heat disengaged by the undulations of air gave increased elasticity—hence, thermology came to the aid of acoustics.

To show, again, how equality leads to quantitative prevision and gives impetus to both mathematics and mechanics, I will cite the advance made by Archimedes in mechanics, by which he preserved the equilibrium

of scales having unequal weights by establishing equal numerical relations between the weights and the levers. Indeed, every advancement is derived from and adds to the general accretion of knowledge.

Chemistry is an essential factor in the advancement of physiology, and these, acting in mutual concert, led to the discovery of galvanic electricity; and galvanic electricity, in turn, has been used effectively in developing physiology and therapeutics.

Form and function have gone hand in hand in developing a knowledge of morbid elements and conditions, while pathology, in turn, has thrown much light on therapeutics. Chemistry and physics both come to the aid of pathology in diagnosis, as exemplified by the former in the analysis of morbid secretions, and by the latter in auscultation and percussion of the chest to determine the condition of the heart and lungs.

Anatomy, physiology, and pathology affiliate with each other, and in some degree with most all the departments of knowledge. It was a step in the right direction when anatomists and physiologists began to examine structures and investigate functions together; and further on they found a boon in the principles of evolution as presented by the study of embryology. Still another advance was made by examining fossils and comparing them with living beings to which they are allied. Here, then, is presented an unity of all the knowledge that pertains to embryology, development, and palæontology—that pertains to genesis, to life, and to development under every conceivable condition.

Cuvier, with his great powers as a thinker and his vast knowledge as a naturalist, was the first to apply the generalizations of comparative anatomy to geology. He studied the earth's strata in connection with their distinctive animal fossils, and thus became the founder of palæontology, and the father of geology as a science.

The origin and progress of the study of zoology will now be noticed. The hunter in primal days observed that some animals were clothed with hair, others with feathers; some had but two legs, while others had four; some had horns, others wings, etc. Linnæus classified the animals according to their external appearances and their habits.

Aristotle first called attention to their organs, but Cuvier studied their distinct organs, and so directed experiment as to make for zoology a new and improved classification. Bichat, however, made the great advancement to which previous observations were tending. He studied the different tissues of each organ, and the properties of each tissue, and then the functions of each organ. So that by an easy and progressive gradation we pass from anatomy to physiology, or from the statical to the dynamical department of zoology.

Now, it is clear that science is an aggregation or a totality of knowledge, answering to a complete organism. It is clear, too, that the study of its embryology brings to light the principles of its evolution, its *consensus*, and the mutual relations of its parts.

Hitherto we have been considering the different departments of knowledge or branches of science synthetically, by tracing them from their genesis to their convergence into the universal laws of relations, of force, and of redistribution of matter. Now let us consider them analytically, and retrace them from their prime center, from those fundamental laws, through their divergence into the various branches into which the organism of knowledge has for convenience been divided. We start out with the abstract uniformities of connection expressed by the universal law of relations, and presented by the modes of being. This is the basis of the abstract sciences. Herbert Spencer has made some analyses of these relations and forces, of which I shall avail myself where they are germane to this phase of the subject.

"Laws of relations that are qualitative, or that are specified in their natures as relations of coincidence or proximity in time and space, but not necessarily in their terms, the natures and amount of which are indifferent." These form the underlying principles of logic; but these relations must be necessary, as distinct from contingent relations. When these relations are quantitative they underly all the branches of mathematics.

Mixed or abstract-concrete science has for its foundation the universal laws of force. When forces are manifested in masses of matter, if in large masses, it is mechanics; if in minute particles of matter, it is molecular

mechanics; and so on, according to the relations between the state of matter and the conditions of force we have statics, hydrostatics, dynamics, chemistry, etc.

Concrete science has for its foundation the laws of redistribution of matter and motion. When we study these laws as they affect the celestial bodies, we have sidereal and planetary astronomy. When the universal law of redistribution changes the composition of inorganic matter, we call an investigation into the phenomena mineralogy; as it is exhibited in aerial gases and liquids we call it meteorology; and in the solids of the earth we call it geology. If we study the laws of redistribution as causing organic phenomena, we call it biology; if these phenomena are of form or structure, we call it morphology; if of function, we call it physiology. And further, when we examine the external relations of these functions, we call it psychology; and when the internal and external relations of functions are considered together, or, rather, when all the organic functions are considered in relation with mental and spiritual endowments, and their relation to the social compact, we call it sociology.

Closely allied to physiology and its offspring is Phrenology, which has but recently dropped its swaddling-bands, but is steadily nurtured by those who are free and competent to think and observe; while in return it is continually giving out increments of light to its nurses and of fame to its godfathers. This child of nature must in time outstrip all its seniors in the elucidation of mental science.

Now we have passed round the corner and seen science from various stand-points. All must conclude that it is one grand totality of knowledge. Who can become a physiologist by studying only part of the

organs of an organism? No one. Who can understand the so-called medical sciences without some knowledge of the whole range of science? No one. Who can be a doctor worthy of the name with knowledge so limited? No one.

I believe that not one out of four of all those who practice medicine properly understands one branch of science that imparts knowledge absolutely demanded by the vocation. More, I believe that if the facts were known, one-half of those who wear the professional ermine have not the literary qualifications to teach a district school. Many are practicing without having passed through the formality of graduating. Many have been graduated in low schools, or in better schools on a low scale; so that a diploma does not definitely indicate merit.

These are plain facts, but they must be admitted, and reformation must come if the profession is to be respectable. By just legislation rid the profession, and relieve the people of impostors. Why not have a law creating a board of one or more competent medical examiners in each congressional district, and oblige all who would practice medicine to undergo a strict examination and be classed according to their merits on a scale running from one to five? This will protect the people against impostors in their old garb of "cure all," as well as their latest dodge by which they assume to know much, look "wise," talk on professional subjects but little when in the presence of superiors. Thus by assumption and reticence they simulate wisdom, and often pass well.

But under the plan proposed it would not be possible to get off a deception. The people would know just what they are doing—whether they call a first, second, third, fourth, or fifth class "doctor."

CHARLES L. CARTER, M.D.

ELECTRIC EXPLODERS.

THE reader could understand this interesting subject better than I can make him on paper were he here, and would take a walk with me to the manufactory of Charles A. Browne & Brother, which is situated about two miles south of North Adams, and a mile west of Westshaft, Hoosac Tunnel.

They have supplied the Shanleys on the tunnel work, and sent their fuses or exploders all over the United States, to Canada, Mexico, South America, St. Gothard's Tunnel, Switzerland, and to Russia. Nine tenths of all used in the United States come from their factory. They have been in the business

some six years. Charles, the older brother, is now entirely blind. He lost his sight in November, 1869, by the premature explosion of a small amount of fulminate, or more, by an inflammation which afterward set in. Last year he went to Paris to have his eyes operated upon, but it was without avail. Yet he is a happy man, the firm is prosperous, and near the shop we should see his residence, just completed, and a little son and daughter playing upon the lawn. The company has taken out five patents relative to this peculiar branch of manufacturing, and two are yet pending. The designs are Charles', but his brother, Isaac, has assisted not a little in "working them up," and in all their business. I believe Charles has thought out all the inventions named since he was blind. The phrenologist would pronounce him a "natural mechanic," and his temperament, representing both strength and delicacy, adapts him admirably to his business. More may be expected of our ingenious Christian neighbor, as he is only thirty-two years of age, and his brother partner, a capable man also, eight years younger. Both were born in Adams, and their parents live near by the brothers' fuse factory.

Now I must begin to tell how these thunder-producing fuses are made and applied. There is a bunch of them before me, looking some like a little bundle of slim snakes tied together, with a copper head and a double tail. It almost makes me "crawl" to look at them, but I must and "report." My blind friend assures me it is "all right." I find that the body of the fuse is made of two covered wires, twisted loosely together, disappearing in the copper head, and about an inch of the other, or tail-end of the said wires, left uncovered. We shall have to be more minute and scientific.

These terrific snakes can be made to explode any charge, if properly constructed. An electric fuse which would "fire off" a powder charge, might fail to explode nitro preparations, such as nitro-glycerine, giant powder or dynamite, and dualin. A word upon these terms.

Nitro-glycerine is composed of nitric acid and glycerine. The sulphuric acid employed is only to anhydrate, the two other ingredients, *i. e.*, remove all the water from them.

Dualin is constituted of nitro-glycerine and some cellulose or woody substance. Dynamite, or giant powder, is a combination of nitro-glycerine and infusoria, sea-shells. These shells have a concave and a convex surface, the cup holding the nitro-glycerine. These all, it is seen, are dilutions of nitro-glycerine, and thought to be safer to handle—not as sensitive, not as liable to explosion from increase of temperature or accidental jar.

Well, how do the Browne brothers make the electrical serpents? First, they purchase the wire, which is of pure copper, and the copper heads, and the material for covering. The wire is to be insulated, so as to retain the whole electrical current. This is done by covering it. Gutta-percha makes the best covering, and India-rubber the next. They are the most expensive. For submarine work they must be had. For ordinary and dry work a covering of cotton thread, saturated with insulating gums, such as wax, tar, and paraffine might be used. The points are, a certain, safe fuse, and then as cheap as possible. I see long coils of wire upon which the thread has been wound by a cunning machine, which wire will be cut into lengths from four to forty feet, indeed according to the depth of the drill-hole or the distance to which it is to be lowered. When the operation is under water the entire adjustment is completed before the lowering takes place. The insulating covering is always removed from the tail-ends of the fuse, and for a purpose which will appear. We will not forget that in making a fuse or electrical exploder of the kind under discussion *two* insulated wires are twisted loosely together. One end is firmly secured to a small cylindrical piece of wood, in which there is a small chamber. Here is the head. The cylinder may be three-fourths of an inch long and three-eighths of an inch in diameter. If you pull off the cap and look down into the lower chamber, you will see the uncovered ends of the double wire a little apart. Into this chamber is placed about one grain of a preparation easily exploded by electricity, and held firmly against the terminals, the ends of the wire, by a small pasteboard disk that acts like the wadding above the powder in a gun. This is termed

the priming of the electric fuse. It might be derived from chlorate of potash, subsulphide and subphosphide of copper. [The reader is not *obliged* to make any of this priming (?)]

The cylinder of wood is inserted within an external case, which may be of wood or copper. For exploding glycerine, copper is better. To explode powder (and the Brownes have the most orders where powder is to be the charge of the drill-hole), the outer case, with its cap, may be of wood. Within this exterior, above the disk and priming, is placed another weird explosive, almost as unearthly as the first. Perhaps it is ten or fifteen grains of the fulminate of mercury. The cap is crowded on, and the whole head dipped in melted paraffine to render it tight, or impervious to moisture.

Let us suppose, say four of the fuses, put to use, and to explode nitro-glycerine, which is said to be thirteen times more powerful than gunpowder. In a heading of rock four holes have been drilled three and a half feet deep. They have been sunk in a manner to aid each other, and a greater result is secured by combined than by separate and successive blasting of one hole at a time. There are other advantages in combined discharges. If but *one* drill-hole is to be blasted, the hands must retire as far as if more were to be fired at the same instant. Tin cans of the right size and length are present, filled with nitro-glycerine. These we will call cartridges. One end is of tin, but the end where it is filled is stopped by a cork. In the center of the cork is a hole through which we pass the head of the fuse until it is submerged in the glycerine. It is made tight around the wires in the corks. We will begin with fuse No. 1, untwist the wires a little, and take one of the bare copper ends and twist it on to one of the two wires of No. 2, and so on until all are united, and there are still two ends at opposite sides for wires leading to opposite poles of the electrical battery. We understand the cartridges are in their respective drill-holes. The attachments are spread over the face of the rock. If the holes are too far apart for the reach of the fuses, a piece of wire is used to lengthen, to complete the connection. The conducting wires leading from the elec-

trical machine and connecting that with the two spare ends of fuse, are also insulated, and must be long enough to allow the machine to be at a safe distance. The conducting wires are lain where they will be safest in the explosion. Everything is removed; everybody gets out of the way. Ready! The machine is operated, and what a concussion! What tearing and rending! The explosions render but one report, although there were twelve of them—three in each hole. The current of electricity passed from the machine down one conducting wire, through each wire of the fuses, and back on the other conducting wire; yet as it would go around the world eight times in a second, this "little trip" occupied no perceptible time. As it leaped from the end of one wire to the end of the other, in the wooden cylinder, the heat of the spark exploded the witchcrafty priming; this exploded the strange second powder in the chamber above, which rended the head of the serpent to atoms and exploded the diabolical nitro-glycerine; that tore open the solid and wedged rock of granite or mica-slate as if it had been a heap of rotten rags! So there were three explosions in each drill-hole, and twelve in all practically simultaneous. Had gunpowder, or any nitro preparation, been used instead of the glycerine, the number of explosions, of course, would have been the same, and also in the same moment.

The battery generally used to create the explosion consists of a vulcanized India-rubber disk, and thin sheets of the same material, coated on opposite sides with tin foil, secured in an outer casing of vulcanized rubber. It is preferred to the glass disk and Leyden jars. The disk revolves between two cushions, by the friction of which electricity is generated or gathered. As the crank is turned, the electrical fluid is accumulated upon the tin foil, spread upon both sides of the rubber sheets. The edges of these sheets are *not* covered, and so dissever two contrary electrical conditions. Two brass knobs pass through the outer case, to which the conducting wires are attached, of which we have spoken. That which supports the brass knob, *within the machine*, is expanded into a nipple. Also within are two metal points which are in metallic communication with

the tin foil upon the sheets of hard rubber, one of the said points bearing upon the foil of one side, the other point touching the foil upon the other side, and also respectively in connection with the aforesaid nipples. It is so arranged that when the crank is turned forward the points shall be separated from the nipples, and the concentrated force, tremulously uneasy to spring an equilibrium, is obliged to occupy the foil. Reverse the crank, and lo! the aforesaid points touch the said nipples, and the electrical stream darts up through the knob or electrode around the circuit, doing its work while seeking rest.

This system of exploding by electricity is comparatively new. It was commenced substantially in '66, by experiments at the Hoosac Tunnel by Col. Tal. P. Shaffner. In many cases its advantages are eminent. Suppose, for instance, the labor is the sinking of a shaft. In the older way a man must touch the fuse, spring into the tub, praying he might be got up by the windlass before the charge "went off." In the new way all the men are up and the conducting wires reach

down their long arms, while some one gently gives a tiny crank a few turns and "the earthquake rocks." There was a case in Canada where the men became angry with the foreman, and when they saw he had fired the old-style fuses with a match, and had jumped into the tub, ran away from the windlass to leave him to be blown to pieces. He had the presence of mind and celerity to spring out and cut each fuse off with his knife. He would not like to repeat the experiment. By the electrical machine forty cartridges, say, might be exploded at once. In a recent experiment my neighbor Brownes so exploded ninety-eight primings. Manifestly, the number would be limited by the size of the electrical machine, the perfection of the conduction, etc. If the priming offered no resistance to the current of electricity, there would be no friction to produce the igniting heat and spark.

I am not advertising for my friends, but would say, that should this brief article excite curiosity it does not appease, the individual could communicate with the Brownes, or with Messrs. Laflin and Rand, 21 Park Row, New York. REV. L. HOLMES.

H. W. F. BOLCKOW, M.P.,

A GREAT IRON MASTER OF ENGLAND.

IN the career of this gentleman we have a fresh illustration of the success attendant on steady, unswerving effort, when backed by sound, practical judgment. The temperament indicates the Teutonic origin of Mr. Bolckow, and the organization is that which we should expect to find in the skillful mechanic. He is not a rapid worker or thinker, but his thought and work interblend. He is slow in coming to conclusions, but his conclusions are sound and definite. He believes in thoroughness. Time is not lost which is occupied in sounding to its bottom a subject of practical utility. What is worth doing is worth all the time necessary to do it well. Such principles, doubtless, occupy prominent places in Mr. Bolckow's "plan of life." He is a robust man in character, well fitted to his business. There is that firmness and staunchness about him which remind one of wrought iron.

He was born at Sulten, in Mecklenburg, Germany, in 1806, and when fifteen years of age he was placed by his parents in a merchant's office at Rostock, where he remained till induced, in 1827, by a former companion, then residing in Newcastle-on-Tyne, to visit England. After thirteen years of successful business operations, in conjunction with that friend, his attention was directed to the development of the iron trade, which was then in its infancy, so far as the North of England was concerned. With rare foresight he selected Middlesbrough as the center of operations—a place hitherto almost unknown to geographers—a not very successful coal port of six or seven thousand inhabitants, and he took into partnership with him the late Mr. John Vaughan—a man not inferior in creative genius to the elder Stephenson—who, from being a common iron-worker, rose, step by step, with Mr. Bolckow. On a very small

scale Messrs. Bolckow and Vaughan commenced, in 1841, the manufacture of iron, bringing the raw material from a distance, and making it into bars, rails, castings, and the like.

It was not till 1850 that Mr. Vaughan,

in their employment at one time over 8,000 men; which annually mines upward of 750,000 tons of ore, and makes nearly 300,000 tons of pig and manufactured iron!

The growing business of Messrs. Bolckow and Vaughan contributed to the extension



while taking a walk, struck his foot against a piece of stone, which, upon examination, proved to be the very thing for which he and his partner had long been searching. The Cleveland ironstone was discovered! Such was the small beginning from which has sprung the gigantic firm which have had

and wealth of Middlesbrough as year followed year, until the population rose to nearly 45,000, and the district of Cleveland is now densely peopled by busy workers. The number of blast furnaces in the district now—of the largest dimensions, and constructed on the most approved principles—

is 120. The "make" of Cleveland iron in 1870 was 1,695,377 tons. To give some definite conception of what this production means, it may be stated that the entire "make" of Scotland in 1870 was 1,206,000 tons, and that of the whole of England about 5,700,000 tons.

Throughout his life Mr. Bolckow has shown that he practically recognized the responsibilities involved in success. Long before councils of conciliation in trade disputes had assumed their present definite form, he proposed that representative boards, consisting of masters and men, should be appointed. He has occupied almost every post of honor in the town and district. He was first Mayor of Middlesbrough; and when the borough was enfranchized by the Reform Act of 1867, he was elected its first Member of Parliament.

Nor has Mr. Bolckow deferred his acts of munificence until death should require the opening of his will. He has done much to improve the town of his adoption. His most princely gift to the people is that of the fine Albert Park, which is said to have cost \$150,000. This park was opened by His Royal Highness Prince Arthur, in 1868, when Mr. Bolckow's loyal hospitality called forth the special thanks of Her Majesty the Queen. He has also presented to Middlesbrough excellent schools, which cost \$35,000, and accommodate nearly one thousand children. Mr. Bolckow's life has been a singularly successful one, and has been distinguished not only by remarkable enterprise, but by prudence and wisely-directed munificence. He has accumulated wealth, but not selfishly, as the condition of the scene of his enterprises and of his many employés can witness.

THE TRINITY OF LITERATURE.*

IN nothing, perhaps, is the demand of the age more distinctly marked than for a trinity in its literature, viz.:

- 1st. The Narrative.
- 2d. The Artistic.
- 3d. The Ethical.

Few read, and fewer buy, a book simply for its story.

In English literature, from Shakspeare to Scott, the artistic cropped out, but even he who could announce that

"The contemplative mind

Finds sermons in stones, tongues in the trees,
Books in the brooks, and good in everything,"

did not aim to help the world by higher teachings.

This was reserved for our times, and the school founded by Dickens and sustained by Thackeray, Trollope, and other compeers.

The average reader should read works of this school three times; say first for the story; second, for the paintings and statuary; and third, for the moral and intellectual lessons.

In the work before us (see foot-note) the narrative is good, the delineations better, and the *morale* the best.

The authoress ("only a woman, you know")

boldly grasps matters of political economy, and handles them in a bold and frequently exhaustive manner.

The marriage relations, divorce, co-operation of workers for production, distribution, and social economy, the currency, are not merely adverted to, but pleasantly discussed and admirably elucidated.

Conservatives are apt to shrink from considering these things, mixing them most illogically and even incomprehensibly with free-love, communism, and other extreme tendencies of the age; but our careful perusal and guarded scrutiny of this work has detected nothing that the most fastidious should object to, unless possessed of a most prurient imagination.

We would like to extract very freely, but must limit ourselves, in conformity with our space, to brief extracts as to the currency problem, as that seems at this time most prominent before the people:

"As they drove down over the old wooden bridge the doctor remarked the necessity of having a new one.

"Yes, I have already thought of that, doctor. I was closeted with your town council yesterday afternoon. I offered to build them a new iron bridge—have it all completed in forty days. I proposed to your town council to issue to me small notes, to the amount of fifty thousand dollars, receivable for all taxes and

* *Papa's Own Girl. A Novel.* By Marie Howland. 12mo; pp. 547. Price \$1.75. John P. Jewett, New York; Lee & Shepherd, Boston.

town dues of all kinds. With these I can pay the workmen.'

"'That is a capital idea,' said the doctor. 'Those notes will circulate perfectly. Everybody wants the bridge. It has been discussed seriously for over three years.'

"'When these notes come into the town treasury it can burn them. They can easily be all redeemed and burnt in the course of a year, and your citizens will have their bridge without feeling the cost in the least.'

* * * * *

"The scrip issued by the town authorities to aid the building of the bridge passed everywhere without question, from the banking-house of Kendrick & Burnham to the farmer's stall in the Oakdale market. In fact, the people rather preferred it to 'greenbacks,' though at first they had eyed it suspiciously, and asked questions. Then it came to be called 'Bridge Scrip,' and the 'count's money,' and was everywhere the text of crude, or deep, financial theories. Said Kendrick, one of the town council, 'This paper is out to the amount of fifty thousand dollars. The taxes have just been collected, but the people took no pains to pay their taxes with it. They did so only in a few cases. I don't see why it might not be kept forever in circulation.'

"'Only,' said another, 'we stand committed to burn it as fast as it comes in.'

"'Of course. I know that, and don't intend to prevent it; but I only say, why would any thing but good come by keeping it in circulation? The men who built the bridge are paid. Von Frauenstein was paid by this paper. He has got it all paid out to his workmen. The scrip has done its work, and it still keeps on working. I only ask, why not let it work for us—that is, the town? It is not only as good as it was at first, but a good deal better, for the town is rich, as everybody knows. What do you think about it, Dr. Forest?'

"'I? I think specie basis all rot. It is simply a relic of barbarism—when there was no commerce, only barter. Then, when civilization advanced a little, and men wanted to sell their ivory, and the buyer had not rhinoceros hides, or whatever was wanted in exchange, there arose the necessity for something, to give in exchange for the ivory, that would buy what the seller wanted. Naturally the first money was bright beads, bright metal coins—things of intrinsic value. As civilization progresses barter ceases, and commerce commences. We have arrived then at the conception of value, and use a mere symbol of it. We don't want

money now that has intrinsic value, any more than we want a figure nine with nine positive strokes in it, or a yardstick made of gold.'

"'But you must have a basis of wealth,' said one of the listeners. 'I know we don't want coin for business purposes. It is unhandy and cumbrous. The commerce of to-day could not march a step without bank-notes and checks. Now the United States issues our paper-money; but it must keep specie in its treasury vaults to the amount of the paper issued, according to some.'

"'Which it does not do,' said the doctor, 'and everybody knows it. You are mistaken in supposing that. It is required simply to keep a certain specie reserve; that is all.'

"'Why don't we bust up, then?' asked an awkward new-comer, who felt the heavy responsibility of citizenship.

"'We can't "bust up," my friend,' said the doctor, with a very broad smile, 'because we have a much better foundation for this paper-money than rhinoceros hides, wampum, or gold coin. That foundation is the wealth of the nation, and the credit of the people.'

"'Ah! but that of necessity would fluctuate; one year is fruitful, another unfruitful.'

"'But the averaging process would preserve the equilibrium,' replied the doctor; 'and gold! you forget how that fluctuates. Why, the discovery of a cheap method of extracting the gold from quartz and gold-bearing sands, liable to happen any day, through our constantly-increasing knowledge of chemistry, and your gold would become ten times as plentiful as it is now. You see that is not the scientific basis. The scientific basis should be the products of industry: the wealth of the nation.'

"'My dear friend,' said Kendrick, 'this question of a proper circulating medium has bothered philosophers from the foundation of the world, and we shall not be likely to settle it in ten minutes on a street corner.' Kendrick had good reasons for being puzzled. As a banker he was getting into deep water; but no alarm had been sounded yet. As he took the doctor's arm and walked toward the new bridge, the doctor said:

"'Nothing tends more directly to the demoralization of the people than a fluctuating currency. It upsets all our ideas of probity. A man buys, for example, a quantity of cotton to-day for a thousand dollars, payable in three months. In three months gold has "gone up," as they say, and instead of paying one thousand, he has to pay eleven or twelve hundred. You see the result is disgust, distrust,

and loss of nice moral balance. A state of things making an inflated currency possible, creates our stock and gold gamblers—makes men see little harm in influencing Congress to favor great monopolies that oppress and rob the people. From this, only one step to corrupting Congressmen with shares in enterprises which they have then a direct interest in favoring. Now what must be the effect of this on the laboring people, who are beginning to see where they stand? I tell you they are everywhere being roused to desperation. Go into any of the labor organizations here and listen to what is openly said. If you don't come away with a vivid impression that this deep muttering foretells a coming storm, all I can say is, you can't read the signs of the times.'"

THE NORTH POLE.

THE great secret of the North Pole still lies locked up in the cold embrace of huge piles of ice and snow, which present a barrier that has thus far baffled all the attempts of the civilized world to discover what lies to the north of them. But, instead of being discouraged by the many failures to penetrate that barrier, and obtain the desired information, the world returns, again and again, to make additional attempts.

After so many trials, with such poor success, will it not at length be found that, in order to obtain the desired knowledge, the investigation had better lay siege, as it were, to it, rather to take it by a mere raid, than as all the attempts hitherto have been?

Nearly eight years since I published a communication in your columns, entitled, "How to Discover the North Pole." I still hold to the ideas therein advanced, as being the most feasible and promising the best success.

The plan therein put forth was, to go with one or more steam vessels, well manned and equipped, as far north as possible, and there establish a base of supplies; and from that gradually to advance into the interior. When the base is well established, to have the vessels return and be fitted out, the next season, with fresh supplies and reinforcements, the while operating on the same principle on which Sebastopol, Richmond, and other strongholds have been taken by military force. These places could never have been taken by cavalry raids, neither can the North Pole be discovered by any such means as have thus far been tried; at least, this raiding method

can be but a partial success, gaining information for the advantage of the besieging parties; they lack the required momentum to penetrate the strong barriers.

Now it would seem that enough of these raids have been made, and sufficient knowledge obtained of the stubborn conditions which beset the regions lying still to the north of where the center of magnetism seems to lie, to prompt them to try the *siege*, instead of repeating the *raid* plan, over and over again, with such bare results. The report of an open sea beyond increases our curiosity and wonder; wonder, inasmuch as, reasoning from analogy, one would think that if at 70°, or 75° north latitude, there were very little but ice, that beyond, the ice would get thicker and thicker, till it became one impenetrable mass. But the suggestion of an open sea, as stated by Kane, Morton, and others, would seem to reveal the fact that perhaps the magnetic center has somewhat to do with these icy conditions.

The first cost of the regular siege plan would be great, and the progress slow, yet in the end really the cheapest, and fully repay the first greater expense and trouble; for it would open the way for many a scientific man who, under the old system, would not find it practical to make a personal study of the northern regions; and the chances are that this class would see more in a few weeks than has, under the present system, been communicated to the world in years; it would bring greater numbers to view the same thing, and thereby attain for science more beneficial results.

Now, if it is still worth our while to explore the regions of the North Pole, it would seem that it would best pay to pursue our work in a manner that will, with the most certainty, promise substantial results. ISAAC P. NOYES.

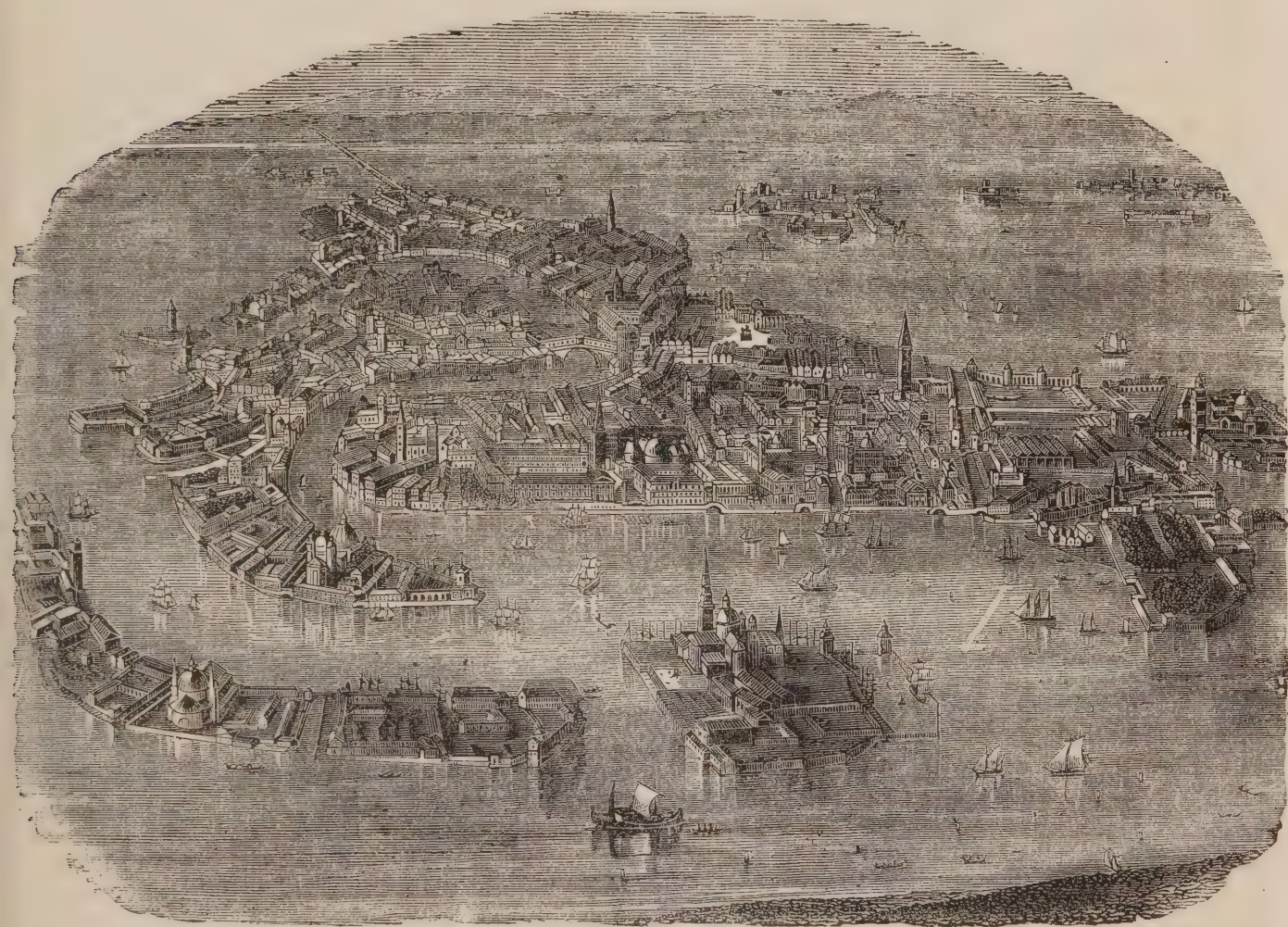
VENICE.

WRITERS will never tire of "beautiful" Venice, that old historic city of the Adriatic, which every European traveler deems it indispensable to see if he would make the round of the most interesting features of Italian life. True city of the sea, as the reader knows, she is built upon a cluster of islets, and so closely built up are those islets that the houses, palaces, churches, etc., seem to rise out the water, and, most of them being of marble, convey to the distant spectator an air of unsubstantiality; particularly in summer and autumn, the seasons of highest tides, when the Grand

Piazza of St. Mark is flooded in part, and every palace is reflected by the rippling green mirror, Venice is marvelously beautiful.

The engraving furnishes an appreciative idea of the general outlines of the city. The Canalazzo, or Grand Canal, is seen winding its way through the massed buildings; this is the principal thoroughfare for traffic or pleasure. There are more than one hundred and forty other canals, or water-streets, with their gondolas plying to and fro. Three hundred and six bridges span these canals, three crossing

of course. This edifice is built of brick, incrustated with colored marbles, exquisitely carved. The political glory of Venice long since passed away, although the days of the doges still light up her history with recitals of great achievements and of magnificence which seems almost incredible. Ziani, Dandolo, Faliero, are among the heroes of those real romances. The discovery of America, and the consequent diversion of trade from Venetian into Spanish ports, and especially internal corruption, led the way to the decadence of Venice. In 1866



VENICE, "CITY OF THE SEA."

the Grand Canal. One of these, the Rialto having a span of ninety-one feet and a breadth of seventy-five. The famous Bridge of Sighs crosses the Rio palazzo, and communicates between prisons on the east and the old ducal palace on the west bank. It is a covered gallery, and prisoners, when led to execution, passed from their cells across this gallery to the palace, and there having heard the sentence of death, were conducted to their doom.

The Square of St. Mark is the great center of business and amusement, and the chief resort of strangers when visiting Venice. The splendid church of San Marco, whose history goes back to 813, gave the name to the square,

the city was incorporated with Italy, and it is expected that the new policy inaugurated by Victor Emanuel will not be without its effect on Venice, awakening her once more to new life and renewed importance. Her population in 1860 was about 125,000.

AGREEABLE PEOPLE.—Few persons are always agreeable in the unrestrained outgoings of their nature. Few people grow naturally into that rare perfection of character and gracious development of mental, moral, and physical habits that the spontaneous expression of themselves will be always pleasing.

Few are so unselfish and delicate in their perceptions that an instinctive tact and quick sympathetic judgment will show them unerringly what is kind and pleasant to another. Each one owes it to himself to avoid being disagreeable. Each one owes to another thoughtful kindness. Real charity and all the gentle refining graces must be the foundation of good manners, but it is not sufficient to have them in the heart. They must express themselves in appropriate forms. There must be culture in character, and culture in manners. There must be reciprocally cause and effect.

A WONDERFUL DISCOVERY.

[The *Golden Age* publishes the following account. We have no advice to give as to investing in the "wonderful." Time will determine whether or not the claims be well founded.]

AN American inventor, Mr. John W. Keeley, asserts that he has discovered a new motive power which is destined to supersede steam. This discovery is a method whereby water is transformed by a mechanical process to vapor, without the application of heat, and yet the transformation results in the production of a motor far more powerful than steam. This discovery is the sequel of twenty-five years of experiment on the part of its inventor.

Before he was twenty years old Mr. Keeley was at work on a model water-wheel, and at that time the idea occurred to him that an engine might be constructed which should be driven partly by water and partly by atmospheric pressure, which should be as powerful as a steam engine and infinitely less expensive. After many experiments he succeeded in making an engine whose motive power was compressed air on one side and a vacuum on the other, while water was the agent for holding the vacuum in suspension. This was, in his opinion, a vast improvement on the steam-engine; but the inventor saw by the working of his model where he could better it by simplifying it. This he proceeded to do, and he now has a motor which is merely a cold vapor produced from water by mechanical means yet so powerful that it can produce a pressure of ten thousand pounds to the square inch. In fact, the tremendous results of this process quite astounded its discoverer. It is also a peculiarity of this vapor that it can be used at any rate of pressure desired, from ten pounds to thousands of pounds to the square inch; it can also be generated and preserved in receiving vessels

for an indefinite length of time without losing its force. Mr. Keeley has proved this by repeated experiments, sometimes keeping the vapor for a fortnight without appreciable loss of power.

When this discovery was first brought to the notice of prominent scientists, the simplicity of the invention made it seem impossible to them; they saw the results, but could not believe the evidence of their own senses. They suspected the hidden presence of electric, magnetic, chemical or other known agencies, when they witnessed the marvelous operation of the machine, but the closest investigation by experts convinced them that Mr. Keeley's assertion was true, that a mechanical process alone generated this strange motive power, which was at once so simple and so tremendous.

There is no doubt, if Mr. Keeley's process proves to be all that it now promises to be, that steam is destined to be superseded entirely by this new motor. An entire revolution in steamships, railway engines, horse cars, and in fact in every department of mechanical operations, will be effected, and that speedily. This process is simple and inexpensive, and its working models are so marvelous in their operations that not only many scientists, but capitalists also, have become converts to the new motive power. Already stock companies have been formed which have purchased the right to use this new and strange motor in various States, New York and New England States among them.

This is an era of scientific progress, and a motive power which shall supersede steam is a no stranger discovery than the electric telegraph or the uses of steam itself. It was one of Prof. Faraday's sayings "that a grain of water contains electrical relations equivalent to a very powerful flash of lightning." If Mr. Keeley has learned the art of extracting these electrical forces from their watery hiding-place and forcing them to do his bidding, he has only wrested one more of Nature's closely-hidden secrets from her jealous keeping, and in this evidence of supremacy over the material world he has given another proof that it is not altogether an idle boast that man is the lord of creation.

[God gave man dominion over nature. It is his to discover, direct, and control her forces. There is nothing irreverent in his attempts to use for his servants the forces of heat, light, air, electricity, water, wind, etc. Even the lightning may be controlled, or rendered harmless, and man may yet be enabled to navigate the air. Who dare attempt to set limits to the reach of the human mind? when man comes *en rapport* with creative power, he may achieve results more wonderful than have yet been dreamed of in our philosophy.]



NEW YORK,

AUGUST, 1874.

HOW TO BUILD UP A MAN.

Therefore whosoever heareth these sayings of mine, and doeth them, I will liken him unto a wise man, which built his house upon a rock; and the rain descended, and the floods came, and the winds blew, and beat upon that house; and it fell not, for it was founded upon a rock.

And every one that heareth these sayings of mine, and doeth them not, shall be likened unto a foolish man, which built his house on the sand; and the rain descended, and the floods came, and the wind blew, and beat upon that house; and it fell, and great was the fall of it.
—BIBLE.

GOD is the real architect. He designed, planned, and furnished the materials, the wood, water, stone, lime, iron, plants, roots, fruits, and so forth which enter into every structure.

When an ignorant savage builds a hut or a wigwam, he builds it to accord with his uncultivated tastes, his few and simple wants. But when civilized men build houses, they employ those skilled in architecture, those who know something of the wants of its—to be—occupants. Among barbarians and semi-barbarians, structures are built in accord with their low condition. If in the tropics, the hut, wigwam, or tent will be very different from the house intended for those who live among the Arctic snows and ice.

We repeat, God is the great architect, and when He designed MAN, what a wonderful self-perpetuating work it was intended to be! What a framework! Look at its outlines. It is perfection. Its strength of body, when developed, is immense; its activity, its powers of locomotion and of endurance are great; and, under favorable conditions, it may live, labor, and enjoy a hundred years. It has a three-fold physical nature, and is at once plant, animal, and man. But its MANHOOD is its crowning glory. In this it surpasses all other created objects. Animals have the senses of sight, hearing, taste, smell, touch;

but man has all these with reason and religion added. Man invents; he has an intuitive perception of right and wrong; he is benevolent, charitable—or should be; he is prophetic, or may be; and he worships and comes *en rapport* with the Divine will, and so may commune with angels and with God.

Man's head may be likened to a hut or a house. If he be an undeveloped savage, he will live in a one-story hut or shanty; that is to say, in the base of his brain, with no up-stairs or high roof. If moderately developed, he will have a two-story house—some intellect, and a rudimentary forecast of something higher. But he will be weak, short-sighted, an easy prey for cunning rogues, and may soon find himself in the poor-house, hospital, prison, or reformatory. He is the creature of appetite and passion. He drinks, and has little power of self-restraint or self-control. He is a miserable structure, an object of pity. But why, if in the image of God, was he so poorly made? Was his father a drunkard? a tobacco-sot? Was his mother a poor, worn-out, or jaded woman? or was she an invalid? Fine human structures are not made out of such materials nor under such conditions. "Men do not gather grapes of thorns, nor figs of thistles."

If one be fairly developed, he may have a three-story house—or head—and so move among the middle classes of men. He will have a home; acquire the wherewith to provide for a family; will plant and reap, buy, sell, manufacture; build railways, ships, school-houses, churches, and become a useful member of society. He is finely endowed with powers of body and faculties of mind, and makes his way on and up in the world. He has well-furnished first and second stories to his house—or head; but the third story is scarcely more than an attic, into which he goes usually say about once a week, six of the seven days being spent in worldly matters. The cellar is well supplied, the kitchen and dining-room well patronized, and the parlors or drawing-rooms enjoyed. Eatables, drinkables, and readables are plentiful. Society, fashion, art, and science attract him. Duty drags him to church, where he displays his dignity, fine clothes, and the "cloak" which is said to cover a multitude of big sins, little sins, white sins, and black sins.

His neighbors know him; he is the man of to-day. He may be a politician, and seek office for the honors and the profits which it brings. If he be a merchant, he deals in—no matter what—that which will make for him the most money, be it whiskey, tobacco, or be it shoddy, quack medicines, or anything which fools may be induced to buy. If he be an ordinary physician, he prescribes much drugs, that is his business. If a lawyer, it is his interest to set neighbors by the ears, while he pockets the fees. If a priest—well, if he *teaches* his followers, he may do them good; but if he keeps them in ignorance, so that he may control them through a superstitious fear, he is their enemy; and instead of building up men in the image of their Maker, he dwarfs them. This is the plane whereon we find the majority of men. As yet they are but fairly developed, not realizing the possibilities of man's reach into the great beyond.

But the more gifted few, and the more **HIGHLY DEVELOPED MEN**, live in houses—or heads—even five or six stories high. Among these were the great philosophers, prophets, seers, and godly men whose minds and characters tower up above those of common men, as mountains tower above mole-hills.

Man, majestic, godly man, is indeed an object worthy the Divine Architect; and God gave such man dominion over nature. He established laws for his government, the observance of which would lead him “onward and upward,” and render him every way acceptable. But in an evil hour man disobeyed, and fell from grace. He ate of the forbidden fruit—*i. e.*, he became *perverted*.

We will—such of us as have minds of our own—interpret nature, God's word and God's works, as best we may, and try to find out how to live healthfully, temperately, and acceptably to Him.

If priests or medicine men offer us a stone when we ask for bread—the truth—whisky or swill when we ask for drink, we may thereby know they are not of God, but of the devil, and we will have none of their poisons. But when the man of God interprets God's word and God's works in such a manner as to enlighten, improve, elevate, and develop the good in our being, we will give thanks to God for the good gift; and,

having learned something of His purposes, we will try to shape our course in accordance with His will, and so build up the man on a solid foundation.

Liquor-drinking and tobacco-using clergymen, doctors, lawyers, writers, teachers, fathers, and mothers are indeed in these things “blind leaders of the blind” at the least, and nothing less than poor, miserable sinners, whose building is founded upon the sands, and when the storms—temptations of life—come, they will be washed away, and all come tumbling down.

Reader, how are *you* building? You have a model—Jesus Christ—before you. He is such an architect as we may build after, with the assurance that our structure will indeed be founded on the everlasting rock which neither rains, nor storms, nor winds, nor floods, nor even earthquakes can move. Let us study God's laws and obey them in all things. In what we eat and in what we drink, in what we think, say, and do, let us be in strict accord with the plan of the great Architect; then we shall build structures at once graceful, healthful, and acceptable. Thy will be done on earth as in Heaven.

BE PROMPT—BE ON TIME.

SOME folks are always late, always in the drag—behind time. They fail to rise in the morning when the bell rings or the gong sounds. They are late at breakfast, and keep others waiting. They are late at church, and come poking in, seeking seats, after the services have commenced. They are too late for the train or the ship, and in coming to their work. Now, this comes of a miserable, lazy habit. There is no excuse for it. It is nothing but self-indulging shiftlessness, which ought to be corrected. Unless it be overcome life will prove a failure.

It is dishonest to cheat an employer out of time for which he pays. When a certain time is agreed on for services, at so much wages, it should be put in; or if not put in, wages should be deducted accordingly. This, however, is not usually exacted by employers, and the amount they lose in unfilled time is considerable. If the ten, fifteen, or twenty minutes every morning be multiplied by the weeks or months the practice continues, it

will be seen how much the employer loses when there is no drawback or "docking" on pay-day. It is only in manufactories where many hands are employed, and where the machinery—when set in motion—*must* be attended to, that promptness is exacted. The way they do it at the Redwood Mills is described by a visitor as follows:

"I should have liked to ask what the tick meant, but was interrupted. I found out afterward that the bell strikes one sound at a quarter past six; in the morning, that is the tick to give the help warning to start. In five minutes after it begins to ring, and rings ten minutes; then the gate is shut, and those that don't get in must wait outside twenty minutes, and go in through the counting-room. A quarter of a day is "docked" from their pay if they are late; that is to make them prompt at their work. The counting-room door is locked as soon as the gate is shut, and woe betide the hands who wait outside, in snow or rain, or an August sun. They are a butt for those who are fortunate enough to get inside, besides enduring the annoying elements and the punishment of waiting."

Severe as this may seem to be to laggards, it is simply just. One has no more right to cheat an employer out of a moment than the employer has a right to cheat the employé out of a cent. To him moments are money, and unless the moments are honestly put in he can not obtain the money where-with to pay full wages.

How common it is for an employee to remark, "I was detained this morning on account of the snow, ice, rain, heat, cars, ferry-boat, sickness, or other causes, which delayed me half an hour." But does he propose to abate, on this account, any part of his wages? Another asks, as a special privilege, to be away a day to see a show, a circus, or to go fishing, hunting, or to attend a wedding or a funeral. The request is usually granted; but in what way is there an equivalent rendered to the employer? One will say he puts in extra time, or does extra work. Then the account is squared, but not otherwise.

The fact is, as a general thing, there is a vast amount of time squandered from employers in the way of commencing late and in quitting early. Besides this, downright

dishonest ones cheat and swindle by that meanest of all mean things which is known as "eye-service," *pretending* to work, but only "shamming." They go through the motions, like a mill when running empty; or, they "put in" when the employer is in sight, but stop and drag along when his back is turned. Such are thieves—simply thieves—stealing time or service which they have sold and are to be paid for. But they "get come up to" in the long run. Tricky in one thing, they become so in all things, and their characters are formed on a tricky basis. They are soon found out, and nobody will trust them out of sight, because known to be untrustworthy. Boys, girls, men, and women, learn to be prompt—always be on time, and permanent success may be yours.

PREACHING—LECTURING.

WHY don't more of our learned clergy-men step out of the beaten path of preaching constantly to the same heads and faces, month after month, and year after year, and go before new audiences now and then? It is all very well, no doubt, to "ding dong bell," "dong bell ding," and to "bell ding dong," half a lifetime to those who, having heard the text and the "Firstly," know in advance what is coming next. How can the good man who saws away, all his life, on one string, help running in a rut? Live people want to hear a live speaker, on live subjects. Abraham, Isaac, and Jacob are palatable, and afford good mental pabulum for variety, but one tires of them as a constant diet. Besides, too much of such food engenders a kind of religious dyspepsia, which no amount of psalm-singing can cure. Now, having carefully considered this matter, we beg to suggest that our preachers be invited to prepare themselves to lecture on secular subjects, as a preparation for better preaching. There are dozens of miserable sinners, in every neighborhood, who seldom or never darken the door of a church when there is to be regular preaching, but who are always ready for a concert, pic-nic, oration, a reading, lecture, or other entertainment. Now, the way to reach, interest, and "draw in" this human flood-wood, and convert it into something useful, would be to catch it in the lecturer's

net. One who can preach, can also lecture; and besides the good he may do, in the way suggested, he may "make it pay" in a pecuniary sense. The clergyman's salary is usually moderate—very moderate, considering his needs. His wants are numerous. He must dress well, or decline in the respect paid him by his people. He needs new books, to keep well informed; but where is the money coming from for these extras? He *needs* a vacation occasionally, but can not afford it. Could he go abroad, only for three months, he would come home not only refreshed, but with mind and soul enlarged, and fitted to do more effective service.

Some clergymen pocket a few extra hundreds, every year, by lecturing on secular or scientific topics. In his time, Theodore Parker earned thousands in this way, which he contributed to worthy charities. Mr. Beecher receives some thousands in this way. We do not see that it lessens his popularity or usefulness as a preacher or as a writer. The Reverends Tyng, senior and junior, go before the people, now and then, without their surplices. Rev. E. H. Chapin is no less distinguished as a platform orator and lecturer than as a preacher. So, too, the graceful Bishop Clark, of Rhode Island, and the Rev. Dr. John Hall, of New York, are eminent as lecturers. We could name half a hundred others. Let these suffice to illustrate our point. Every clergyman, not fully occupied and not fully paid for all his time, may easily qualify himself to step from the pulpit to the platform, and catch more men, and pocket more coppers, with less outlay, than by any other means within our knowledge. Then, why not? It will be all in the right line—in the service of God and humanity. We would also suggest two or three topics that will "draw," and always "pay:"

1st. We would name: Personal Physiognomy; how to improve it, and how to spoil it. Of course, Temperance comes in here. A few drawings will show the effects of dissipation on the "human face divine."

2d. Good Manners; how to behave—at home, at church, on the street, everywhere. Mr. Parker drew large houses when he lectured on "The Gentleman;" and this, of course, had to do with a correct deportment.

3d. The Tongue; its use and abuse—

gossip, slander, scolding, singing, praying, etc. It is a good subject for a most useful lecture.

Then there are any number of topics which can be made instructive and entertaining to a popular audience—such as astronomy, botany, geology, natural history, etc., to be treated in a fresh, racy style. A lecture each, on the lion, the monkey, the elephant, the whale, the shark, the grizzly bear, etc., could be made to "pay." Then there are the Mormons, the Shakers, and other classes. A lecture on the Religions of the World, would do. So of Inventions; Progress of the Race; Ethnology; Phrenology; Psychology; Woman's Rights; Education of the Sexes; Our American States—Cities—Government; Monarchies; Empires; Republics, etc..

But enough. If we can trot out our clergy, and induce them to occupy the lecturing field, it will displace a heap of the most worthless trash that now floats hither and thither through the country, leaving only black ashes in their dirty trails. It would also tend to weaken the hold which the burnt-cork gentry, called negro minstrels, now have on the public. What is needed, is, instruction and entertainment combined; and this our clergy, of all the different churches, *can* and *ought* to furnish. Will they do it?

ADVERTISING FOR A WIFE.

IN itself, there is nothing wrong in one human being intimating, by advertisement, that he or she desires a companion. Because it is something new, or unusual, does not imply that it is bad. But the thing is so liable to abuse, in the hands of the bad, that the good are not likely to adopt it. We do not, therefore, approve or open our pages to matrimonial advertisements, though by doing so we could make money, and, perhaps, serve some well-disposed people. Here is an evidently honest letter, from an intelligent lady, which explains itself. We withhold name and address, and publish it simply to show what some people think about such things. It is but cold comfort, to the unmated, to be told by those who are happily settled that such a course is improper, and that they must wait. There are a few millions more women

than men in the world—owing to wars, migrations, armies, navies, etc., which destroy many more men than women—and, since polygamy is to be stopped, what shall be done? “Oh, let them live singly!” Yes; but suppose *they* would rather not? Companionship would be as sweet for them as it is for you. While one may be content to live a life of single-blessedness, or to join the Shakers, and so become a seedless saint, a dozen would prefer a husband, a home, and children.

JUNE 8, 1874.

DEAR SIR: Inclosed please find two dollars, for which I wish you to insert the accompanying advertisement. I am a widow, without children; have a good education; can and do teach school; am a graduate of medicine also. I have been a widow fourteen years, and I am getting lonely. I want some one to have me who will be my very own. I am getting too old, now, to be satisfied with the friendships that I make in my vocation, and I want to be settled in a home. I am in good health and vigor—can work hard, and accomplish more than many women much younger than I, and I am *willing* to work. I am making a good living, but I want a permanent home, with a head to it that will be above me. If this matter is not against your principles, please acquiesce in what I request. I have used my own name in the “ad.” for it is too common to be noted; and I would ask you if any letters come for me to please remail them to my proper address, which please keep private for the present. I address you this because I have a friend who married well, some years ago, by an advertisement, and I hope it will do for me now. If you know of any way to help me, shall be glad to hear from you. If you can not insert this “ad.” for me, please return me the money.

Yours truly, MRS. ———.

We can not grant the lady's request by publishing her “ad.” though we have the best evidence that “she means just what she says.” We can only suggest to her that, in these days of railways, steamboats, and stage-coaches, it is not difficult to become acquainted with many people. We have churches, societies, etc., through which people may become acquainted with others; and an earnest, unmarried lady, in the West, especially, can scarcely go far without finding suitable companionship. It was the standing advice of a lately-departed philosopher to young men to “go West.” We can not see why young or unmarried women should not now also go West, where the men are

somewhat in the majority. We look to the Rocky Mountain regions for the development of a new, or at least an improved, race of men and women. Colorado, Montana, Nevada, Wyoming, Utah, Oregon, Washington, etc., will turn out such specimens of the *genus homo*, within the next hundred years, as will make the Blue-noses ashamed of themselves. We have a prophecy on this subject which we will print, ere long, and give our readers a reason for the faith which is in us.

But we object to a man seeking or taking a wife for his own special benefit or pleasure. We would have him put it on other and less selfish grounds. He who offers to make himself the husband of a lady for *her* sake, and where the desire is mutual, is the more worthy.

Nor is it a high motive, on the part of a woman, to seek a husband for his money, or for a home for herself, without much regard as to *his* happiness. When men and women seek companionship from less selfish motives than those which usually prevail, there will be much more real happiness in the world. When we, each of us, in wedlock and out of it, act on the divine injunction to “do as we would be done by,” we shall hit the nail on the head. Or, when we act on the principle that “it is more blessed to give than to receive,” we shall attain a higher degree of godliness, and therefore real happiness, than when we marry for money or because we wish to appropriate another human being *entirely* to our own selfish selves. “Be ye not unequally yoked.”

STUDYING FOR A PROFESSION.

A YOUNG independent New Englander, who had an eye on No. 1, was studying for the ministry in one of the one hundred and eight theological schools in the United States, and when about to graduate he found out that this was one of the worst paid professions, as people in general care more for their bodies than for their souls; so at the nick of time he changed his mind and studied medicine in one of the ninety-two medical colleges. When almost through this very useful course of training he discovered an important fact, namely that people care more for their pockets than for their bodies, or for anything else. This settled the matter for him; he again changed his mind—this time

definitely—he went to study law.—*Manufacturer and Builder*.

[Is this the end? No. At the next step we shall have him in the "Ring." He will become a pot-house politician, or a shyster, or a gambler, or anywhere on the road down, down, down, all because he selfishly sought, not the good of others, but the gratification of his own selfish nature. Is it not more blessed to give than to receive?]

FUNCTIONS OF THE BRAIN.

"RECENT researches made in England appear to establish the fact that each convolution of the brain is a separate organ, though several of them may work together, and often do; that the great motion centers are collected in the front part of the brain; that the muscles of the jaw are moved by the convolution just above the ear, where the phrenologists locate Alimentiveness; that the main, if not the sole use of the cerebellum is to move the muscles of the eye, which is thus more amply supplied with brain power than any other portion of the body of equal

size, and that epilepsy is caused by a lesion between two convolutions of the brain."

The New York *Tribune* gives to its readers the above paragraph. Thus, scientific men are nibbling at cerebral science, and, we doubt not, if they have an open field for a hundred years to come, they will reach the results contained in Dr. Gall's discoveries made three-quarters of a century ago.

It gives us pleasure to see scientific, secular, and religious journals give place to such speculations and demonstrations. If they emanated from professed phrenological teachers some of them would not, on any account, give them a place in their columns. Poisons are said to become innocuous when prescribed by a learned physician; and we suppose bigotry and prejudice will swallow Phrenology if dealt out in prescriptive dribblets by those who sneer at the professors of human science. Let the demonstrations go on. These men will soon elbow Gall and Spurzheim out of the calendar, and seek themselves a place as the discoverers of the functions of the brain.

AGRICULTURAL HINTS.

How to have Good Hay.—Mr. Beekman, of Ulster Co., N. Y., communicating with a State paper on this subject writes: It is a mystery to me why farmers who feed all their own hay can be so unwise as to leave their grass standing until it is dead ripe. The farmer who sells his hay does so because he thinks it weighs more and shrinks less, though where the difference lies (honestly considered) between selling over-ripe hay, sanded sugar, or watered milk, is not clear to my mind. In either case the purchaser sustains a loss, paying an exorbitant price for a poor article. I write feelingly upon this subject, having bought hay last winter of three farmers, paying \$25 per ton. My own supply gave out early in March; the cows were then averaging six pounds each of butter. Upon purchased hay they run down to less than four pounds, though fed a larger amount of roots and one quart extra of corn-meal to each cow. Besides this loss, was the additional labor of chaffing the hay to induce them to eat it, loss of flesh, and less skim-milk for calves. The butter also lost much of its high flavor and rich color. I often wish those men could be compelled to live for

one winter upon comparatively harsh and un-nutritious food; doubtless they would learn something by the experience. I attribute the great superiority of my own hay to these three points: first, early cutting; second, thick seeding; and, third, liberal manuring. I believe (would like Prof. Arnold's opinion) that there is more nutriment in a ton of hay from a meadow liberally top-dressed with cattle manure than in the same quantity from a poor meadow. I have seen farmers plow up meadow land, take off a crop of corn, then a crop of oats next spring, and in the fall seed down to rye. In a year or two the grass is run out, and the same rotation is gone through again; seldom, if ever, is any manure used. Surely old mother earth is very patient to bear such treatment year after year, but the end will come at last. To return to the hay question. Those farmers who allow their hay to get ripe before cutting, over-reach themselves. Timothy starts very slowly after being cut, is bulbous-rooted, and suffers from the drying effects of sun and wind. If cut early, it soon starts again; and if the aftermath is not pastured, such meadows, with an occasional top-dressing, will last for years.

Proper Distances for Root Plant-

ING.—A writer in the *N. Y. Tribune* says: Distances between rows and plants in the row must depend upon the variety. The large growing beets and mangels should have at least four square feet to each plant. I would have the distance between the rows $2\frac{1}{2}$ feet; this is a sufficient space to run the cultivator. When the rows are $2\frac{1}{2}$ feet apart, I would let the plants stand 18 inches in the row. These distances, 18×30 , will give 11,616 plants per acre. In the summer of 1872 I tried an experiment as to distances between plants of three varieties, one of beets and two of wurtzels. The result was nearly the same with the first two varieties, and I will therefore give the facts of the beets. Plots of land sowed April 23, rows 30 inches apart, plants at different distances in the rows, gave the following results: Plants 6 inches apart in the row produced at the rate of $37\frac{1}{2}$ tons per acre; 9 inches apart, $38\frac{1}{2}$ tons; 12 inches, $41\frac{1}{2}$ tons; 15 inches, 44 tons; 18 inches, $44\frac{1}{2}$ tons. Two plants together, 18 inches between bunches, produced at the rate of $40\frac{1}{2}$ tons per acre; 3 plants together, $39\frac{1}{2}$ tons. In this experiment I was exact in the distances between rows and plants. I used sufficient seed to insure at least one plant in each hill. This experiment proves that plants 18 inches apart in the row produced more than any distance less, and that single plants will yield better than two or more in each hill. The Yellow Globe mangel produced the greatest yield at 12 inches apart in the row. A crop of beets can be raised at very much less expense when single plants are 18 inches apart than at distances less than that. When the plants are but 6 inches in the row, the labor is nearly or quite double. Beets 18 inches by 30 will give the following result: Beets weighing 3 pounds would give to the acre $17\frac{1}{2}$ tons; 4 pounds, $23\frac{1}{2}$ tons; 5 pounds, 29 tons; 6 pounds, $33\frac{1}{2}$ tons; 7 pounds, $40\frac{1}{2}$ tons; 8 pounds, $46\frac{1}{2}$ tons. On good land well manured, and the crop well cared for, it is not difficult to raise beets averaging 8 pounds each by the acre. It is always better that the crop should be made up of large, sound roots than that it should consist of a greater number of smaller ones, even though the weight be the same per acre. The large roots require less labor from the singling out to the final harvesting of the crop, and, indeed, till they are fed out.

Tent Caterpillars.—Keep an eye on this scourge of the orchard, and as soon as he prepares his foundation go for him with a

brush or broom dipped in coal oil; a solution of carbolic soap also has a demoralizing effect on the scamp. Delay is dangerous—action imperative.

Agricultural Facts of the Union.

—Hon. Samuel Ruggles, of New York, a most laborious and reliable statistician, gave, at the last meeting of the Chamber of Commerce, a condensed statement of facts concerning our national agriculture; comprising some of the results of months of careful calculation:

1. The agriculture of the American Union is the broad and enduring basis of its national strength.

2. Its agricultural population of 5,922,471 in 1870, had created and acquired a property in agricultural wealth valued at \$11,124,558,747, showing an average value of \$1,878 per head, yielding a net yearly income of \$360.

3. Every million added to that agricultural population will consequently add at least \$1,878,000,000 to the national wealth.

4. The present yearly increase in this population being 82,432, an additional million will be gained every thirteen years.

5. These additional millions will be urgently needed, and can be readily supplied by Europe from time to time and from age to age, to enable the American Union to produce and export the vegetable and animal products to feed, and the cotton to clothe the large and steadily increasing population of Europe.

6. The ten interior States north of the Ohio River, and on the upper lakes and Upper Mississippi and Missouri, produced in the year 1870, 812,151,925 bushels of cereals, weighing more than 21,000,000 of tons avoirdupois. By the close of the present century, twenty-six years hence, these States will probably produce annually forty, and perhaps fifty, millions of tons.

7. It has now become a matter of vital interest, not only to the American Union, but to the common civilization and welfare of the world, to improve to the utmost all the water-ways, natural or artificial, affording cheap transportation from the immense interior of North America to the ocean.

Tobacco Culture.—An exchange says, "There will be more tobacco grown in California this year than ever before. Seed in many instances has been imported direct from Havana. There is only a small breadth of land suitable for the crop in the entire State. The amount devoted to this culture this year probably does not exceed three or four thousand

acres." And this is three or four thousand acres too much of good land to be prostituted to such a nefarious use. Tobacco-raising ruins good soil, and resultantly ruins human health and happiness. Oh, farmers, learn wisdom!

One Sugar Maple.—There is a famous sugar maple tree in South Sunapee, N. H., on land recently owned by Mrs. Sally Wells. It is reported to be the first tree that came up on the first clearing in Saville, now South Sunapee. It was first tapped in 1823, and has since averaged annually twenty-two and a half pounds of the finest quality of sugar. The tree is now over nine feet in circumference, and looks as thrifty as ever.

Apples.—The prospect for the apple crop in New England never was better at this season. The owner of one orchard in Central Massachusetts estimates the probable yield at two thousand five hundred barrels ready for shipment. The Tudor Company ship annually several thousand barrels to China, the East Indies, and Jamaica, where they are regarded as a great luxury by the English and American residents. There is no fruit better adapted to constant use than the apple.

Sound Economy.—The Rockford (Ala.) grange has adopted this resolution: "That we will retrench our expenditures for dress and living, and confine them to articles actually necessary for decency, comfort, and good health, and will deny ourselves, as far as possible, the purchase of such things, both as to dress and living, as are superfluous." This resolution, rigidly enforced throughout the South, would be worth millions to the agriculturists of that section, and the North, too, could copy it with advantage.

Everlasting Fence Posts.—I discovered many years ago that wood could be made to last longer than iron in the ground, but thought the process so simple and inexpensive that it was not worth while making any stir about it. I would as soon have poplar, basswood, or quaking asp as any other kind of timber for fence posts. I have taken out basswood posts after having been set seven years, which were as sound when taken out as when they were first put in the ground. Time and weather seemed to have no effect on them. The posts can be prepared for less than two cents apiece. This is the recipe: Take boiled linseed oil and stir it in pulverized charcoal to the consistency of paint. Put a coat of this over the timber, and there is not a man that will live to see it rot.—*Homestead.*

Pruning.—Do not prune after the sap has commenced to circulate, and not until midsummer, when the wounds heal over readily. If prune you must, and will, cover all wounds with grafting wax, paint, or some other preparation to exclude the air, otherwise decay will necessarily follow.

A Bouquet.—Churches were made fragrant with beautiful flowers on Easter day. Then, kindly and considerate church folks divided the flowers and sent them to the asylums, hospitals, and prisons. What, send beautiful bouquets to wicked sinners! What are prisons for except to confine and to punish culprits? But may we not exhibit to them the emblems of a risen Christ? and is not this one of the objects of Easter flowers? It was done, and report says many a "hardened wretch" shed tears on beholding the evidences of a thoughtful regard by Christ's followers. Emblems of the Resurrection! Though dead they shall rise again, as the green grass and beautiful flowers reappear each succeeding spring and summer. So those dead in sin may be resurrected, as it were, by being "born again," and coming out of darkness into—spiritual—light. We believe in the softening, refining, and purifying influences of flowers. In the old country, railway stations are surrounded by patches of flowers. Gentlemen wear little bouquets of rosebuds in their buttonholes; ladies wear them at their breasts; little boys and little girls are thought to be better behaved when there are flowers present. Even a workshop would be rendered more attractive by having a pretty bouquet in sight of all the operatives. Teachers should have bouquets on their school-room desks every day. Preachers may have bouquets in their pulpits. No? Why not? "Oh, it would divert attention from the sermon." Not a bit of it. On the contrary, it would impart a fragrance and a beauty to the senses, in keeping with the high, holy, and heavenly teachings one hopes to find in such places. The most popular preacher in America seldom or never preaches—in his own church—without being surrounded with fresh and fragrant flowers. The platform of Plymouth pulpit, on Brooklyn Heights, is generally well garnished with flowers, which fill the vast edifice with their beauty and perfume. Do they detract from the live utterances of Mr. Beecher? We like the thing, and trust others will imitate this beautiful practice.

Lecturers on Phrenology, and, indeed, lecturers on any subject, will find it a pretty thing to do to have a pair of handsome bouquets before them and before their audiences whenever and wherever they lecture. Try it. It will pay.

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, of correspondent shall expect us to give him the benefit of an early consideration.

ABSENCE OF MIND.—Is absent-mindedness a disease? If so, what causes it, and can the difficulty be obviated? If so, how?

Ans. The term "absence of mind" is a misnomer, except in cases of idiocy, where the mind seems to be absent altogether. That which bears this name may have many causes. It frequently comes from moderate perception and large Causality. It sometimes comes from large Ideality and Spirituality. In the first case, absence of perception tends to shut the mind up from giving attention to outward affairs, and leads the person to ruminate, meditate, and think over old thoughts and go over and over the same thought. When one wakes in the night in a dark room, and has nothing to attract his perception, he will think for hours on some topic which has interested him during the day, or at some time. He will labor to study out some abstruse problem, or some invention; and this is akin to absence of mind, for the mind is working, though it takes no cognizance of that which is away. When one has large Ideality and Spirituality, dreamy contemplations may absorb the individual and make him inattentive to surrounding things. Absence of mind is not stupidity, for those who have the deepest meditation, who are richest and ripest in thought, are quite as liable to be oblivious to surroundings. The great Isaac Newton sometimes was so absorbed in his studies that he did some ridiculous things. He once shouted violently to a servant to move the fire away from him because it was too hot. If one has a perfectly balanced head, with all the organs well developed, absence of mind will not be likely to affect him. Still, such a person might sometimes experience such activity of the meditative or imaginative faculties that his eyes would be shut to all surrounding things. Nothing is more

common than to see a person who is asked a question place his hand over his eyes, and demand silence, thus shutting out external things, until he falls back upon memory and judgment, and so reaches the conclusions he seeks, and, when this is done, he removes his hand from his eyes, and again attends to surrounding things. On the other hand, absence of mind may be indicated through an extra activity and intensity of the perceptive. When a dog has his eye on his game he does not look to see where his feet go; he will run through fire, or water, or against a fence. We have seen a cat rush for a rat or mouse in a manner so wild and unrelated to surrounding objects that she would have run against any obstacle in her way. If one's attention is thoroughly riveted to a given object, it sometimes acts as a charm, renders the hearing obtuse, and one must be touched or shaken to be aroused from that fascination. Absence of mind, then, means the absorption of particular faculties in given directions to the exclusion of the general action of all the faculties, and the way to cure it is to change the conditions.

WEIGHT OF INFANTS.—What is the average weight of children at birth, and what is the heaviest known weight of a child at birth, and what the least weight of a child that has lived?

Ans. The average weight of children at birth is, boys, 7½ pounds; girls, 6½ pounds. It is impossible to state the least size of a viable child, as it depends upon other considerations than mere weight. Some are said to have weighed less than three pounds who lived. Generally those weighing less than five pounds fail to thrive, and die very soon after birth. European children average less in weight at birth than American children. Of 3,000 children born under the charge of Dr. Cazeau, in Paris, the largest weighed ten pounds. Of 4,000 born at La Maternité, under Madame La Chapelle, the largest weighed 12½ pounds. In England Richard Crofts had a case weighing fifteen pounds. J. D. Owen saw a still-born infant which weighed 17 pounds 12 ounces. The largest authenticated case on record is that of a still-born child born in 1849 in Paris, under Cazeau, which weighed 18 pounds, and was 25½ inches long. In this case the weight and measurement were three times verified by different physicians. In Quincy, Ill., during 1868 six male children were born who averaged 13½ pounds. The smallest weighed 12 pounds and the largest 17½ pounds. In Detroit, in February, 1869, a boy was born weighing 16

pounds, and was 24½ inches long. The usual weight of his mother was only 92 pounds.

THE LOCOMOTIVE ENGINE.—In your Mentor Bureau talks to correspondents please give the history in a few words of the invention of the locomotive steam-engine as applied to railroad cars. I know about Watt, but am anxious to be better posted on the subject.

Ans. The credit of bringing out the first steam-wagon, the precursor of the locomotive, is quite generally given to Oliver Evans, of Philadelphia, who, in 1782, patented a device for propelling carriages by steam. Watt patented a steam-wagon in 1784. In 1802 Richard Trevithick, an Englishman, brought out a high-pressure locomotive engine, which did fairly on a level surface. Improvements were made by others until George Stephenson may be said to have perfected the adaptation of the locomotive to the purposes of railway transportation by a series of experiments and improved devices extending from 1814 to 1829, when his engine, the "Rocket," was deemed the best ever made in England. On the day of its trial it made the then prodigious distance of 35 miles in an hour, now 60 miles is common.

HOW TO CLEAN SKULLS.—I have skulls of the dog, cat, pig, bird, mink, and woodchuck, and hope to have others. I wish to know how I may make them clean and white without spoiling them.

Ans. The best possible way of cleaning small skulls, such as those of birds and small animals, whose skulls are very thin and not united very firmly by sutures, or cartilage, is to place them by an ant heap, one of the large ones, and in twenty-four hours the skeleton of a squirrel or small bird would be thoroughly cleaned of the flesh, the ants eating it entirely away. In this case, if it be not allowed to remain too long, the skeleton will be entire, the cartilages holding the bones in place while the soft parts will be all gone.

Human skulls, or skulls of large animals, may be put in a loose sack, or netting, and placed in a running stream in warm weather, and the flesh will be removed; and then the skulls may be bleached on the top of a house by the sun. Some people boil the flesh off from both large and small skulls. The best, the only complete way to clean skulls entirely from all oily matter, without injuring the bone, is to submerge them in a bath of ether, contained in a glass vessel with an air-tight cover. The finest preparations are made in this way. Lime, or alkali in any form, takes all the animal matter out of bones, making them dry, brittle, and chalky. A little soda, or other alkaline substance, may be applied, in solution, to skulls without seriously injuring them.

"WEEK'S DOINGS IN WALL STREET."—Will it be safe for me to invest money with a firm advertising under the above title?

Ans. Yes, if you wish to take a risk. No, if you would take no risk. Why not apply to parties

well known? Our general advice in such cases is, "Look out!"

SOUL, MIND, SPIRIT.—Are the soul and mind synonymous? or are there three immortal parts of man, viz: mind, soul, and spirit?

Another asks: "When the person sleeps, does his mind rest?"

Ans. These, and many other questions, are asked frequently, and receive answers in the JOURNAL. But we have new subscribers who did not read the JOURNAL the previous year, and therefore feel the need of answers to the same questions which have served others the year before. In the February number, 1873, the following appears, and we copy it as an answer to the above:

SOUL AND MIND.—I. Are the soul and mind one? II. Does the mind rest when we sleep?

Ans. The mind is sometimes spoken of as the intellect, judgment, memory; and the soul is sometimes spoken of as independent of mind or reason, referring, of course, to the spiritual nature of man. But strictly speaking, the term "mind" covers every sentiment, intelligent principle, and emotion. In speaking of the soul generally we include the moral and intellectual faculties; but in its broadest sense, all that goes to make the mental life—all the emotions as well as the spiritual and intellectual powers—go to make man a human soul. But if one is idiotic in the moral and intellectual faculties, his soul is like that of the babe—hidden, undeveloped. Dreaming teaches us that sleep is more or less partial. It is when sleep is disturbed or imperfect that dreams occur, or, rather, perhaps that we are able to remember them. It is supposed that in complete sleep the mind is quite at rest. When sleep is disturbed or partial, we remember the imperfect, inconsistent, and ridiculous action of those of our faculties which are awake or partially so, yet acting without the enlightening influence of other faculties.

TO E. M. M.—The organs of Cautionness and Firmness large, with Combaticiveness, Destructiveness, and Self-Esteem full, would make a person prudent, steadfast, and thorough, without being quarrelsome, cruel, or overbearing.

PERSONAL POPULARITY.—Why are some persons more popular than others, though wanting in good looks, and being apparently selfish and independent? and others, again, with limited capacity command more respect and wield more influence than those gifted with more talent. Are these gifts attainable by all, and, if so, how?

Ans. A person may be plain looking, and may have some strong selfish and independent dispositions, yet he has a knowledge of human character, agreeableness, friendship, practical judgment, and a desire to please. Persons of limited capacity, intellectually, who have harmonious and well-balanced minds, so far as they extend, make few mistakes, and have good common sense, if not what is called talent. They may be just, true, faithful, friendly, reliable, energetic, with power

to govern and thoroughly control others. There are some men who have superlative intellectual gifts, yet they have neither tact, practical judgment, nor any of the elements of popularity, or economy, or force of character, or friendship, and they can not get along successfully in the world, or adapt themselves to the common affairs of life. They may make great inventions; they may solve strange and abstruse problems, but be lacking in common sense about common things.

All the faculties may be improved by culture and proper exercise. Some people are too anxious to please, and over-do in their efforts, and others give offense and become unpopular.

REASON WHY.—Why does nitrous oxide cause people to laugh who inhale it?

Ans. Because it introduces into the body more oxygen than can be consumed. It therefore deranges the nervous system, and, being a powerful stimulant, gives an unnatural activity to the nervous centers and brain. This derangement usually exhibits itself in a pleasurable excitement to those who inhale it—causing them to be merry, almost to insanity. It has therefore been called *laughing gas*.—*The Druggist*.

[And this nitrous oxide is by no means uniform in its action. While one is induced to laugh immoderately, another is excited to fight, another to pray, another to sing, another to love, and so on, according to the different temperaments and developments of the phrenological faculties. One may thus foretell what will be the effects on different persons.]

DR. TRALL.—A sketch of this gentleman, with a portrait, was published in 1864, June number.

What They Say.

SUGGESTIONS.—The following explains itself:

YORK, PA.—MR. WELLS—Dear Sir: If any of our fellow-mortals of the Negro race read the PHRENOLOGICAL JOURNAL, they will be pleased to read about a real live phrenologist of nearly pure Negro blood who has lectured and given charts in this place. Mr. C. L. Thomas, one of our merchant tailors, possesses three charts of his character, and the best one was given by this Negro. This lecturer came here from the West, lectured on Phrenology and Physiology in the colored church to good audiences, and gave many and good charts, and canvassed the town. He was then (1869) about thirty years of age, intelligent, well-educated, polite, and a good speaker. His name was Murray. I have satisfied myself that he was a real sound phrenologist; but perhaps he did not understand hygiene. Now, you have given us a picture of a Negro girl (tied to a post), who was probably no phrenologist or hygienist, and death was welcome, as life perhaps to her was full of sorrow and troubles caused by ignorance. May

we not hope to see hygiene and all the elevating truths spread all over Europe, Asia, and Africa? Why not have phrenologists of all races? If Indians knew what we know they would throw away their scalping-knives, and consider the taking of a chart better than scalping. Then let us press forward and conquer the world! **E. J. C.**

[Certainly, let us have phrenologists of every nation, tribe, and color. When facilities shall be furnished us for the free education of all classes in Phrenology and Hygiene, as is now done for religious missionaries, we shall rejoice. While others are trying to evangelize the world, let us try to lead the world "onward and upward" through physiology, physiognomy, hygiene, and psychology.]

SIZE, QUALITY, POWER.—It is interesting to note the recognition which our teachings meet with here and there in the pulpit and in the press. Note the following from the *Christian at Work*:

"The Rev. Thomas Guthrie, of Edinburg, was one of those massive and herculean characters that now and then reproduce an epic grandeur in human action, such as we are wont to ascribe to the heroic ages. Six feet two inches and a half in stature, he was broad-shouldered, lithe in movement, abounding in animal spirits, fond of athletic sports, and brimfull of humor.

"His autobiography, so far as he was able to carry it, is radiant with an electrical animation. Himself the almost unconscious center of the spectacle he presents, of men, scenes, events, policies, and plans with whom and with which he was connected, he lights up his surroundings, so that his narrative is a vital photograph of his times. We have never read anything finer in the line of autobiographical literature."

DR. GUTHRIE, father of the system of ragged schools, which has done so much for the youth of the old country, and who worked so effectually in the cause of temperance, was a large, manly man. He did not sap or dwarf his body or brain by beer, bourbon, or tobacco, nor by other vices and abuses so common among men; but he lived a temperate, intelligent, consistent, godly life, respected and beloved by even millions, whom his efforts and encouraging words lifted up on a higher plane than they had hitherto occupied. He was, indeed, a moral Hercules, the admiration of all who ever were privileged to behold him or listen to his heavenly voice. He was a man. **W.**

SUNDAY-SCHOOL TEACHING.—I am persuaded that it requires as much skill and ingenuity to marshal successfully the forces of a Sunday-school class, and bring out all the dormant faculties of the several minds, and march them in the right direction, as it does successfully to marshal a brigade of soldiers upon the field of battle, and bring out all their slumbering heroism. If you observe the experienced general upon the field of battle, you will see him ride up and down the line

of his troops, and from their attitude, and the expression of their faces, he seems to read their character and thoughts. You will hear him speak a word of encouragement to those who seem wavering; and to those who seem eager for the fray, he has a word of moderation, saying, "Boys, be brave, but be cautious. Remember that a life saved among you is of more value than a life lost among your enemies." And thus, by his knowledge of human nature, every available force is brought into action, and every impulse of the soul is so directed that heart beats in unison with heart, and they march forward a solid phalanx. In the Sabbath-school we have all grades of mentality to deal with; the quiet and the wavering, that need our words of encouragement; the active and boisterous, that require words of restraint; the ready answering, the superficial, and the deliberate and deep. Now, in order to make the most of these available forces of intellect, we should study the individual character of each one in our class, just as the true captain studies the individual character of his men. And if you would be a thoroughly successful teacher, you must not only study the individual characters of your class, but also "know thyself," and by your example as well as precept be enabled to gain the entire confidence of your pupils. D. P. BLISS.

**AN INCIDENT OF PERVERTED APPE-
TITE.**—About forty years ago a youth of fine talent, who had learned the carpenter's trade, left old Connecticut to seek employment in another region. The world was before him, and his hopes bright. A kind mother had directed him in the right path, and he parted from her with her blessing and prayer. Many a compliment and encouraging word did he receive from his friends and associates. Air castles of success and wealth dazzled his mind. No one in his trade should excel him; nothing was beyond the possible, and he scouted the idea of failure. After visiting several large places, and accomplishing a number of praiseworthy efforts, he reached a village in the western part of New York, where he was destined to play the larger part of his act of life. He was a welcome guest. Men admired his abilities and commended his work. He was faithful to his word and conscientious in his labor. Business increased, and all was fair. Not a few were the favorable prophecies made concerning his future.

Society, forty years ago, was far different than it is now. Children were taught that whisky and wine were a necessity, and harmless. In those "good old days" not only business men and ruffians drank the poison, but ministers, deacons, and women indulged in it. A person who would not partake was a fanatic or an enthusiast, worthy of ridicule. Our friend, of course, must take a social glass. It would not do to offend so many valuable friends. At this period of his history, a thoughtful person might have observed that he

partook of liquor with too much relish. But who, in the constant flow of the beverage, would notice such a trifling matter? The vampire had fastened himself to his victim, and was gradually sucking his life-blood and destroying his vitality. Yet, astonishing as it would seem to us, no one saw it; not even himself. His associates were gay, and many a glorious time did they have under the reign of King Alcohol. His business decreased; his weaknesses became known. Some pitied, more ridiculed his misfortune.

By the persuasion of some real friends he joined the Sons of Temperance, and for a time led a sober life. Men rejoiced at the change, and hoped they could again place confidence in him. They encouraged him; but his was a short triumph. The enemy came, and softly whispered in his ear. He listened, and yielded to temptation. The result was most sad. A few spasmodic attempts to throw the vampire off were made, but in vain. The agonized soul stares from the degraded misery of the present into the awful realities of the future.

For the last ten years all the money he has obtained by labor has gone toward hastening his ruin. Respectable raiment was doffed for rags, or for the cast off clothing of compassionate friends. He was honest with every one but God and himself. He worked in his sober intervals, and thus saved himself from the poor-house. His honesty astonished his acquaintances, and excited deep sympathy in his favor. He keenly appreciated his situation. He once said to the writer, "It is hard to go down to death without any hope. I read my Bible and think about it when I am alone." His bleary eyes, downcast look, wrinkled face, and bent form were a pitiable sight—a sad wreck of what might have been. He verily understood the words of the poet—

"Of all sad words of tongue or pen,

The saddest are: It might have been."

The day came at last when the cords of life were severed. During a week of cold and cheerless weather last winter, you might have seen him lying in an ill-furnished room, suffering all the agonies which are a sure reward of a dissipated life. No wife, children, relation, or friends stood by to comfort him in his dying hours. No happy recollections of a Godly life full of good deeds soothed him. But he hoped. Even in his most deplorable state he begged the pardon of a God he had not served. He died thus. Let the imagination paint the truth which the pen fails to do. A funeral sermon was preached, but no mourners were present to shed a tear over his remains. He had gone, and no one regretted, but rather felt relieved. His life was a failure. He desired to attain honor and distinction, and become an ornament to society, but brought destruction upon himself, and was a reproach to mankind. May God help all who read this to restrain the appetites, and be "temperate in all things."

E. E. C

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

LIFE AND PUBLIC SERVICES OF CHARLES SUMNER. By C. Edwards Lester, author of "The Napoleon Dynasty," etc. Sold only by subscription. One vol., royal octavo; beveled boards. Price, \$5. New York: United States Publishing Company.

For vigorous writing and vivid description we commend the reader to Mr. Lester's "Life of Sumner." Whether this shall prove to be a second "Boswell's Johnson" in every detail of character, we may not say; but that it gives a general outline of one of our grandest American characters there is no question. We have, for example, Sumner's Parentage and Education; European Travels and Studies; Professional Life; Orations and Political Speeches; Senatorial Career; The Interval of Illness and Repose; Return to the Senate; The War of the Rebellion; Downfall of Slavery; Emancipation of the African Race; His Last Great Efforts; Public Honors to his Memory; His Influence upon his Age.

The author quotes the salient points made by press and pulpit soon after his death, showing how profound was the respect felt, not only throughout the Union, but by the civilized world for this statesman orator. The book is illustrated with several full-page engravings, and a steel portrait, with autograph.

Mr. Lester says, "Since the death of the Father of the Republic, which filled the country with grief and threw distant nations into mourning, there have been but three funerals in America which bore even a faint resemblance to that in the depth and extent of public sorrow; and these have all occurred within the last few years. The *first*, was of Abraham Lincoln, who holds the next place to Washington in the hearts of our people, and who is enshrined among the few beloved names which all mankind cherish; the *second* was of Horace Greeley, whose death revealed so widespread and strangely tender an affection among all classes and conditions of men; and now comes the *last* name in this wonderful triumvirate of great, gifted, and good men, who, taken together, will, in ages to come, be mentioned on the same historic page, whenever the leaf is turned which records memorials of the astounding events which have transpired so near the close of our first hundred years."

AN ACCOUNT OF THE PRIVATE LIFE and Public Services of Salmon Portland Chase. By Robert B. Warden. One vol., royal octavo; pp. 854; cloth; beveled boards. Price, \$5.50. Sold only by subscription. Cincinnati: Wilsatch, Baldwin & Co.

Here is the first contribution toward a complete personal history of one of America's greatest jur-

ists, orators, and statesmen. If it be a fact that "distance lends enchantment to the view," then the present generation will come short of fully appreciating the value of Mr. Chase's life to the Union, or the loss we suffered in his premature death. The modest author, who was for many years most intimate with Mr. Chase, compiles all the salient facts illustrative of this great man's career. The book should find a place in every public, nay, in every private library, for its perusal and reperusal will beget in the reader a higher patriotism and a nobler Christian life. Mr. Chase was every inch a man, and combined more of the qualities which go to make up a perfect human character than one meets among thousands. His life and his works will follow him. Those interested should send stamp to the publisher for a descriptive circular and a table of contents, from which full particulars may be obtained.

THE NEW YORK TOMBS; Its Secrets and Mysteries. Being a History of Noted Criminals, with Narratives of their crimes, as Gathered by Charles Sutton, Warden of the Prison. Edited by James B. Mix and Samuel A. Mackeever. Splendidly Illustrated from Original Designs. Sold only by Subscription. One vol., octavo; pp. 669; beveled boards. Price, \$3.50. New York: United States Publishing Company.

Here is genuine sensation. It is said that publications relating to murders and other crimes have the largest sale. There seems to be a morbid disposition on the part of many uncultured minds to gloat over the misfortunes and infirmities of poor frail humanity. In the present volume we have a compendium of the criminal records from the first execution in New York to the present time. In the same volume pictures are given of many hanging scenes; many shootings, including modes of punishment from the pillory to the gallows. The work contains over one hundred illustrations, including portraits of noted criminals, lawyers, judges, sheriffs, etc. The book is sold only by subscription. Were we authorized press censors, the book would be suppressed. We think the influence of such literature bad, and only bad.

OUR FIRST HUNDRED YEARS: The Life of the Republic of the United States of America. Illustrated in its Four Great Periods: Colonization, Consolidation, Development, Achievement. By C. Edwards Lester, author of "The Glory and Shame of England," etc. Octavo. New York: U. S. Publishing Company.

Were we permitted to digress from the usual method of noticing or describing new books as issued from the press, we should in this instance entertain our readers by a description of the author, Mr. Lester. In short, he is out of the old Jonathan Edwards stock. Looked at from a moderate distance, the observer would be impressed by the grandeur of his structure. He stands as straight as a ramrod, upward of six feet high, and weighs something more than two hundred pounds. He has a massive brain, measuring nearly 24 inches in circumference, with a most striking physiogno-

my. His features are strongly marked; a speaking eye, which thrills you. A prominent Roman nose, and a long and full upper lip, plainly say, "Clear the track, I am coming." Mr. Lester is liberally educated; has written other books besides "The Glory and Shame of England." He was at one time correspondent of the *London Times*; has written leaders for the *Herald*, *Tribune*, and other New York dailies, and has occupied positions of honor in different departments of our Government. This is one side of the subject which we have a right to relate concerning the author. About other matters, personal to himself, the public has no business to inquire.

The book before us gives the gist of our first hundred years of history, besides a retrospect from the discovery by Columbus in 1492 to the present 1874. It considers the progress of American population, agriculture, commerce, manufactures, public works, inventions and discoveries, education, religion, finance, foreign relations, literature, extension of the Republic, biographies of great men. Then we have since the war with Mexico the progress of the nation carefully traced through our civil war to the present. It is such a work as will be convenient for reference, and always inspiring to the reader. We regret that it should only find its way to the public through subscription agents.

WOMAN'S EDUCATION, and Woman's Health. Chiefly in Reply to "Sex in Education." By George F. Comfort, A.M., Dean of the College of Fine Arts of Syracuse University, N. Y., and Mrs. Anna Manning Comfort, M.D. One vol., 12mo; pp. 155; muslin. Price, \$1. Syracuse: Thos. W. Durston & Co.

If Dr. Clark can see himself as others see him, he will probably correct some of his errors before he writes another woman book. His "Sex in Education" stirred up many women, and they are buzzing about like bees around a sugar tub. Some of these bees have stings, and they will not be hived away without giving him a touch.

These Comforts seem to be as capable of judging what are woman's rights, spheres, duties, and capabilities as Dr. Clark, if not "a little more so," and it will do one good to read their book. It is quite natural for one to pay another off in his own coin. And these good people may have erred, as Dr. Clark has done in tearing down rather than in building up.

ANCIENT SYMBOL WORSHIP. Influence of the Phallic Idea in the Religions of Antiquity. By Hodder M. Westropp and C. Staniland Wake. With an Introduction, Additional Notes, and an Appendix by Alexander Wilder, M.D. One vol., octavo; pp. 98. New York: J. W. Bouton.

This book carries us back to the time when man worshiped according to the dim light he had;—this was the best he knew. In the preface the author says, "They worshiped the Supreme Being as the *Father* of men, and saw no impurity in the symbolism of *parentage* to indicate the work of creation. What is divine to be and to do, can

not be immodest and wicked to express. No man born of woman can with decency impugn the operation of that law to which he owes his existence; and he is impious beyond others who regards that law as only sensual. We may easily perceive how the Phallic emblems were adopted to denote the kinship of mankind to the Creator. Those who employed them apprehended no wrong in so doing, till impurity of life had caused all that related to the subject to be considered as indecorous."

THE MORMON COUNTRY. A Summer with the "Latter-Day Saints." By John Codman. One vol., 12mo; muslin. Price, \$1.50. New York: U. S. Publishing Company.

A racily written book, without any higher motive than profit and amusement. A number of striking though coarse cuts picture some comically interesting scenes, and give the book a spicy setting off, which will induce purchasers to part with a greenback and take an imaginary tramp with the author. Mormons will not thank Mr. Codman for his opinions, but he had a right to visit Utah, to write a book, and to sell it. He acted on this right, and let those who will, read.

GEO. P. ROWELL & Co.'s American Newspaper Directory, Containing Accurate Lists of all the Newspapers and Periodicals Published in the United States and Territories, and the Dominion of Canada and British Colonies of North America. One vol., royal octavo; pp. 896; beveled boards; muslin. Price, \$5. Free to Advertisers. New York: Geo. P. Rowell & Co.

A history of all the newspapers and magazines now published in the United States and in the North American British Provinces. There are nearly eight thousand periodicals issued within the regions named. To be exact, we have the history of 7,784, showing an increase over that of previous years of upward of a thousand. Perfect accuracy with respect to the exact circulation of each can not be expected; but fairness is evidently aimed at by the editors. In regard to the desirableness of such a work, there can be no question; it is well-nigh indispensable to the business man, who has occasion to advertise, much or little. Besides the general list of papers arranged in States, we have a classified list embracing all the religious, agricultural, medical, surgical, educational, and those for children and youth; also those devoted to Free Masonry, Odd Fellowship, to commerce, finance, insurance, real estate, science, mechanics, law, music, fashion, woman's suffrage, etc. Then we have all the papers in foreign languages classified, the German, French, Scandinavian, Spanish, Italian, Welsh, Portugese, Polish, Cherokee, etc. It is a ponderous volume, yet compact, crisp, and bristling with business life. An assured circulation of many thousand copies is given to this work. We can not see how any considerable advertiser can dispense with it, unless, indeed, he keeps to old customs, and without such modern light, concludes to "go it blind."

RESEARCHES IN THE PHENOMENA OF SPIRITUALISM. By William Crookes, F.R.S., London: J. Burns, 15 Southampton Row, Holborn, W. C. Price, 30 cents.

This interesting treatise purports to explain scientifically that which is called Spiritualism. Prof. Crookes is an able scientist of London, and entered upon the investigation, of which his book is a summary, with that candor and sincerity which should dignify the labors of a member of the Royal Society, who seeks only for truth, without any object other than its proper development. He constructed various ingenious machines, or instruments, by which he subjected the so-called mediumistic manifestations to very rigid scrutiny, and he reached the conclusion that a certain hitherto unknown force exists applicable to mechanism, and thus exhibiting energy capable of being tested by delicate apparatus. This force, in itself operating without physical agencies, he denominates *Psychic Force*. Yet Mr. Crookes entirely disclaims accepting the phenomena as of spiritual origin, but he is satisfied that it originates in a cause hitherto unknown.

There is but one thing that seems sad in connection with his labors and announcements, namely, that his associates in the Royal Society appear to ignore, or stand at a distance, and carp at his labor, and think they know more about it by not investigating than Mr. Crookes does after his investigations.

Our author seems to have been very honest, and to have entered upon his work with a cold, clean-cut love of truth, determined to accept nothing that is not thoroughly proved, and the Royal Society seems afraid to touch the subject. We admire courage even in a questionable cause, and all the more in a good one. While scientific men should seek truth with sharp discrimination, we think they should give a better hospitality to all claims of advanced ideas than they are accustomed to. They seem to stand with weapons to put down and destroy every new plant that bursts the soil, because, in its incipency, it does not show the full fruition of what it is to be. And new sciences, like such plants, stand little chance of living, except they grow in some secluded nook, and show flower and fruitage before these fierce opponents of novelty have a chance to strangle them. Suppose men from unknown shores were to undertake, by swimming, to land among us, and we were to stand with clubs to beat them back the moment they tried to set foot on the shore. The only possible way the new comers could ever find a foothold would be to enter some secluded nook by swimming under water, and hiding themselves away until they became strong enough in numbers to command respect.

Astronomy, Geology, Phrenology have been obliged thus to fight for a footing, and Mr. Crookes finds when he attempts to apply science to Spiritualism that his brethren give him the cold shoulder, and probably will drop him, as Prof.

Hare of Philadelphia twenty years ago was dropped by scientific men, who never were able to be his peers; and as soon as he had adopted a new idea he was considered *lunatic*. "Have any of the Pharisees and rulers believed?" is often the question to-day as it was eighteen hundred years ago.

We do not advocate what is called Spiritualism; but God forbid that we should blindly ignore anything. The subject, as it has generally been investigated, is surrounded with mystery and doubt. Science has generally condemned it as trick, or as the emanation of perverted imagination. Now that an able scientist offers to test the phenomena by scientific means, it is a shame that his brethren avoid the subject and the crucial tests purporting to have been applied to it. It is neither brave nor honest.

NINTH ANNUAL REPORT of the National Temperance Society and Publication House, Presented in New York May 11, 1874. Octavo; pp. 92; pamphlet. 25 cts. New York: National Temperance Society and Publication House.

In these high temperance times, a live report like this finds a hearty acceptance among all the old temperance war horses. The war will not cease until the evil is abated. The Hammonds, Crosbys, and other apologists for moderate drinking, must retreat before this avalanche of holy indignation.

THE HEBREW LEADER—which was suspended on the death of its former proprietor, Dr. Bondi—has been resuscitated, and now reappears in an enlarged form.

The *Hebrew Leader* is a weekly journal, devoted to Jewish and general literature, art, politics, commerce, news, and all topics of current interest. Published every Friday, by the "H. L. A.," 196 Broadway, N. Y. Samuel A. Lewis, President; S. N. Leo, M.D., Secretary; J. P. Solomon, Editor. All communications should be addressed as follows: The *Hebrew Leader*, Box 514, Post-office, New York City.

MEMORIAL BULLETIN OF THE AMERICAN GEOGRAPHICAL SOCIETY. April, 23d, 1874. Contains the Life and services of Dr. David Livingstone, an honorary member of the Society, with remarks of Chief-Justice Daly, of Major H. C. Dane, and addresses by Rev. Wm. Adams, D.D., Rev. Henry Ward Beecher, Dr. I. I. Hays, and of Rev. N. H. Schenck, D.D., New York. Printed for the Society. A beautiful tribute to a noble, self-sacrificing character.

THE ANNUAL ANNOUNCEMENT FOR 1874 of Packard's Business College contains extracts from the proceedings of several anniversaries or commencements, which are very interesting. On those occasions distinguished gentlemen of New York contributed to render them pleasant and profitable to all who attended by addresses full of practical wisdom on the subject of education; and the cream of these addresses Mr. Packard has gathered in the pages of his last "Announcement." For ability, experience, industry, and enterprise, Mr. Packard has no superiors among conductors of business colleges.

A LECTURE on Commercial Fertilizers at Home and Abroad. By Prof. W. O. Atwater, of Wesleyan University, Middletown, Conn. Octavo pamphlet; pp, 54. Price, 25 cents.

Here is science applied to a most important article of commerce. Next to dealing in quack medical specifics, is that of dealing in fraudulent fertilizers by swindling dealers. Prof. Atwater shows up this whole business, and we would have every one interested peruse this document.

GOODRICH'S PIANO-FORTE MANUAL, Without Mechanical Exercises. Fully Explaining the Theory of Playing; the Peculiarities of the Instrument; the Manner of Producing Various Effects; a Complete Treatise upon the Pedals, with Valuable Examples. The whole carefully Selected and Graded from the Works of the best Composers, with every Variety of Style and Execution. Folio size, extra paper. Price, \$2.50.

This excellent piano-student's assistant, noticed some months since, is now completed. It has already received the high commendations of leading pianists. Can be supplied through this office.

THE NORTH AMERICAN JOURNAL OF HOMEOPATHY, May, 1874. Current No. 88. Quarterly. S. Lilienthal, M.D., editor. The Original and Translated Papers in this number treat upon the recent Yellow Fever Epidemic in Memphis; Sphere of the Feelings, Solar and Lunar Influences; Clinical Notes on Nervous Diseases of Women; Diabetes and its Treatment by the Homeopathic Method. Price, \$4 a year; single copy, \$1. New York: Boericke & Tafel.

Holding, as we do, that all curative power comes, not from drugs or medicines, but from the living principle within the body, we welcome every effort looking to the disuse of medicines, and to the substitution of hygienic agencies for the cure of diseases. Homeopathy claims to be an improvement on allopathy; is not hygiene an improvement on all medical theories?

THE PRISONER'S FRIEND. A prospectus is issued for a weekly paper under this title, to be published at \$2 a year by John F. Augustus, 147 Tremont Street, Boston, Mass. Why call it the *Prisoner's Friend*? Is it not to be equally the friend of all? The thing to do, it seems to us, is to appoint suitable persons to manage our prisons and prisoners; to put them in a way of training and improvement, so that they may ultimately become self-supporting citizens. But we must first remove some of the temptations to crime before much will be done in the way of befriending prisoners. Get rid of alcohol and tobacco, and you will reduce the number of criminals at least fifty per cent. in ten years. We wish well to all efforts looking to improvement in this direction.

THE MITE-CHEST PAMPHLET. With supplement and key to missionary map. No. 1, Jan., 1874; No. 2 to be issued in July. Octavo, 34 pages, with portraits and sketches of the following named missionary bishops, with map showing the field of their work: Nebraska, Bishop

Clarkson, whose address is at Omaha; Montana, Utah, and Idaho, Bishop Tuttle, Salt Lake City; Oregon and Washington Territory, Bishop Morris, Salem; Nevada and Territory of Arizona, Bishop Whittaker, Carson City; Arkansas and Indian Territory, Bishop Pierce, Little Rock; Niobrara and Indian Territory, Bishop Hare, Yankton; Colorado, Wyoming, and New Mexico, Bishop Spaulding, Denver. Those interested in the work of these bishops may inform themselves more fully by procuring copies of the *Mite-Chest Pamphlet*, which will be sent on receipt of 25 cents by Rev. A. T. Twing, 22 Bible House, New York.

FAITH AS A DISTINCTIVE ELEMENT; or, The Philosophy of Prayer and Woman's Power. By J. P. Root. Octavo; pp. 16; pamphlet. Price, 10 cents. Gibson Brothers, printers, Washington, D. C.

Written in the interest of the woman's mission in temperance work. Send a dime to the Gibson Brothers, printers, Washington, D. C., and obtain a copy.

A FIRST-RATE NEWSPAPER.—THE INTER-OCEAN—Daily and weekly—is one of the best newspapers published in this country. In enterprise it equals the best, and in moral principles it surpasses its contemporaries. Taken all in all, it has no superior as a literary, commercial, and family newspaper. The daily costs \$12 a year; the weekly—a large eight page sheet with forty-eight columns of reading matter—costs only \$1.50 a year. Try it. Address, *Inter-Ocean*, Chicago, Ill.

A NEW LECTURER.—Mr. John G. Evans, of Bangor, Maine, is about to enter the field as a lecturer on Phrenology, Physiology, etc. His special subjects all branch forth from the following stem: He will show that the science of Phrenology is in harmony with the teachings of the sacred volume, and is the best commentary upon it; that the Old Testament is the natural man—a development from the social faculties upward, from Amativeness to Veneration; that the New Testament is a reverse order—that which is first in the Old is last in the New. Hence the necessity of the new birth.

THAT HEAVEN AND HELL are states of the faculties; or, using the Saviour's language, "It is within you."

That in order to develop true manhood the physical, organical, and moral laws must be recognized and kept.

That every sane man has certain furniture of mind called faculties, and that the Bible calls him who is deficient in them "a fool." Ps. xiv.

That there are three sources of knowledge: 1. Senses. 2. Understanding. 3. Faith.

That the object of all science is to reduce phenomena from the region of the senses by the understanding into faith; or, in other words, to the region of first principles.

That God is a first principle; hence can not be proved; but He proves all things, etc.

That the ultimate ground of action is the good of being.

That ability is commensurate with obligation.

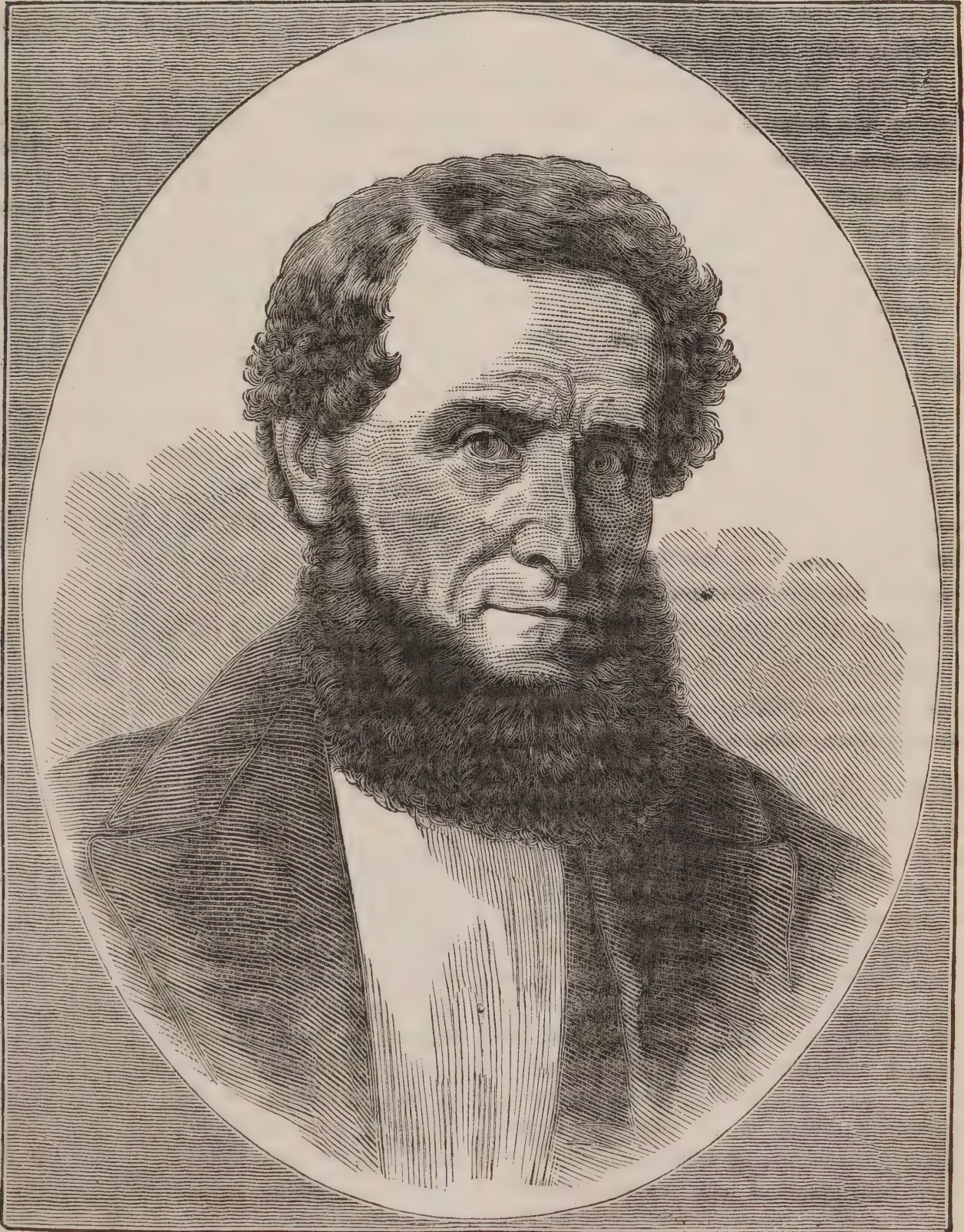
That all the above propositions, and hundreds besides, are asserted or implied in "the Book," and ratified by Phrenology.

THE
PHRENOLOGICAL JOURNAL
AND
LIFE ILLUSTRATED.

VOL. LIX.—No. 3.]

September, 1874.

[WHOLE No. 429.]



MR. JAMES LICK, OF CALIFORNIA.

JAMES LICK, THE BENEVOLENT MILLIONAIRE OF CALIFORNIA.

IN this countenance we have the indication of an active, keen, shrewd, cautious, secretive, earnest, tenacious, persevering, saving, calculating, thoughtful, honest, kindly, enterprising man.

There is "business" in that head and face. How intense the expression! There is no sloth or dullness in either brain or face; the keen, penetrating mind, acts through and sharpens the features. There are no idle thoughts there—no lazy hairs in the head. Activity, energy, push, drive, go-a-head are seen in every wrinkle. That closely-knit brow means close and careful scrutiny. Those piercing eyes mean penetration. That thin, prominent, clearly-cut nose, with its dilating nostrils, means an active mental temperament. That compressed mouth and long upper lip mean determination and decision. He can say no, and stick to it. That high, broad, and full forehead means ability to think, reason, originate; and the large Constructiveness assists in planning and contriving; while the large Combativeness and Destructiveness contribute their parts toward the execution of his designs. He has large Firmness and Continuity, and so holds steadily to a purpose, finishing what he has begun.

Of Mr. JAMES LICK, our readers have doubtless heard, especially through the general interest awakened by his munificent contributions to California science, art, and society. The peculiar features of his gift-making challenge respect, for while they are out of the usual line of endowments established by wealthy capitalists, they have a practical utility which is at once understood and appreciated. Of these, however, further on.

James Lick was born at Fredericksburg, Lebanon Co., Penn., on the 25th of August, 1796; consequently, he is now not far from seventy-eight years of age, but, according to the photograph he has cordially sent us, and of which the engraving (recently published

in *Harper's Weekly*, and by that paper supplied to us) is an excellent copy, he is still a youthful-looking man. Having a mechanical turn of mind, he was not satisfied with the pursuit of his father, who was a farmer. He desired to engage in enterprises of a broad, expansive character, and in whatever he attempted as a young man, with few facilities and fewer encouragements, he exhibited energy, enterprise, and diligence of the rarest sort.

In 1821 he left his old home and went to South America, his purpose being to engage in the manufacture and sale of pianos. Whether that scheme failed or not we can not say, but we find him next in Buenos Ayres, where he spent ten years, owning or controlling large ranchos. He lived in Chili four years, and eleven in Lima, Peru, always pushing forward certain commercial projects quietly, unobtrusively, but with excellent results.

In 1847, when the news of the gold discoveries in California reached him, he was a business man in Valparaiso. Believing an opportunity had come for a grand "strike," he at once set out for San Francisco, and once there selected such property as his keen foresight decided would rapidly appreciate in value, and invested the profits of his South American ventures in it. It is said that he then purchased land to the extent of \$20,000 worth, and to-day that land is valued at millions.

The good judgment of Mr. Lick is well shown in the following incident, which we find in a California publication:

"In 1853, J. B. Weller, United States Senator from California, said, in his place, 'I would not give six bits for all the agricultural lands in California.' At this very time Mr. Lick was preparing the foundations for a flouring-mill in Santa Clara county, which, with its massive foundations, fine burr-stones, and interior finishings of solid mahogany, had, before it was completed, cost him half a million of dollars. This done, he took fifty acres of adjoining land, reduced its surface to a spirit level, and set, by the square and compass, with his own hands, the whole with

the choicest varieties of pear trees. These operations, and numerous others, proved very remunerative."

Ten years or so later he erected the Lick House, one of the finest hotels in the country. In fine, nearly everything which he has done since 1855 has been of large proportions, at once creditable to the man and honorable to city and State where he has made his home. He had not forgotten his birthplace in Lebanon County, Penn., for a few years since he had the old house removed all the way to his farm in California, and there set up and furnished with the same appointments as were familiar to him so many years ago.

The manner in which Mr. Lick has applied his vast estate is thus set forth:

"To the observatory, already founded by him at Lake Tahoe, he gives \$700,000, to purchase such a telescope and other apparatus as the world has not yet seen. He gives \$250,000 for public monuments in Sacramento, and \$150,000 for city baths for the people; \$300,000 for a school of mechanical arts in California, and \$150,000 for a monument in Golden Gate Park to Francis B. Key, the author of "The Star Spangled Banner." Various sums are given to beneficent societies, for instance: "Old Ladies' Home, San Francisco, \$100,000; Ladies' Protection and Relief Society, San Francisco, \$25,000; Protestant Orphan Asylum, San Francisco, \$25,000; Orphan Asylum, San José, \$25,000; Mechanics' Library, San Francisco, \$10,000; Society for the Prevention of Cruelty to Animals, San Francisco, \$10,000; to Academy of Sciences and Pioneer Society, San Francisco, residue of estate—perhaps, \$225,000."

Some criticism has been made on the large amount designated by Mr. Lick for the Key monument, and in this place it may be stated that that munificent patron of art had more reason for his act in this behalf than people, not old Californians, appreciate.

When California was on the brink of being hurried out of the Union, by secession advocates, in 1861 that song was hissed from the stage in the leading theater of San Francisco. The following evening that theater was densely crowded with lovers of the old flag, and as it appeared upon the stage in the hands of the lady vocalist who had been

driven off the night before, the Star Spangled Banner was greeted with one of the most thrilling and soul-stirring acclaims that ever went up from human voices, and that night secession stock in San Francisco went almost to zero, and never rose again. For a long time after that the soul-stirring verses were among the most popular of songs sung on the Pacific slope. Mr. Lick's proposed memorial to its author is an expression of patriotic remembrances.

His gifts amount to \$2,000,000. He provides for the comfort of his relatives also, and reserves to himself his homestead and \$25,000 a year.

Taken altogether a more splendid act of benevolence and public-spiritedness does not exist on the record of American millionaires. May Mr. Lick live long to witness the good results of his benefactions.

AGAINST THE TIDE.

THE Chicago *Interior* says: "We have great respect for that large class of the human family whose energies are given to 'bearing up.' It is a fine thing to do things, but a finer thing—to just stand it. Most people are in that defensive attitude. We all start out aggressively, events push us hard. First we slacken, then we halt, then we back up against a wall and bear it.

"The castles in the air drift into darkness, and ambition's pictures become dissolving views, and the man finds himself under the sober skies of forty with empty hands, bending shoulders, unmarked days in the present, and uncertain ones in the future. The fame or fortune that nerved his young life is under the horizon. The stimulus of hope that held him up, is wasted and gone. Forge and anvil, spade and shovel, from morning to night. The mortgage clings to the cottage, and hard work can not lift it. Doctors' bills take the surplus. Gray hairs are coming, and the monotonous years wear on. There is nothing ahead to look to, and nothing in the present to notch the days, save a little harder work, a more restless night, and gradually failing strength. Under this gathering gloom the man does nothing fine, thinks nothing great; he only bears bravely up. If the neighbors ever give

a man a thought, it is only to say, 'Poor fellow, things go rather against him.' But blessed is the man who can go against things, and hold his way with buoyant heart, under 'skies that are ashen and sober,' over 'leaves that are withered and sere.' In God's reckoning of the human lives, there will doubtless be a great reversal of estimates, and for the comfort of those who make no headway against wind and tide, it will appear at last that

" 'They also serve
Who only stand and wait.' "

[The possession of riches is no evidence of soul-growth, nor are worldly honors evidences of honesty. The man who graciously accepts the inevitable, and who shapes his course in accordance with the natural laws and the Divine will, whatever may be his position in society, or his possessions, is the man to trust—the man who will try to do his duty.]

Department of Religion and Psychology.

Know,

Without or star, or angel, for their guide,

Who worships God shall find him.—*Young's Night Thoughts.*

The soul, the mother of deep fears, of high-hopes infinite;

Of glorious dreams, mysterious tears, of sleepless inner sight.—*Mrs. Hemans.*

SUPERSTITION.

—o—

"WE may smile, or coldly sneer,
The while such ghostly tales we hear;
And wonder why they were believed,
And how wise men could be deceived.
Bathing our renovated sight
In the free Gospel's glorious light,
We marvel it was ever night."—*Vigil of Love.*

THE sharp contest now in progress in Europe between the civil orders of Germany and Italy and the Roman Catholics, whose adhesion to papal domination is close and continuous, seems to have developed an era of miracle play and of religious pilgrimages, which, considering the age we live in, is very remarkable. For more than a year trains of the faithful have been seen wending their way from different parts of Europe to the shrine of "Our Lady of Lourdes," where a peasant is said to have seen and conversed with the Virgin Mary, and where numerous cures of disease-burdened people are said to have been wrought. Even Americans have caught the infection; for, not long since, a party of nearly one hundred persons was organized for a pilgrimage to the shrine above mentioned, and to visit the pope and get his blessing. In France and Germany there are several localities which possess the characteristics, imparted by some incident of a religious nature, which attract pilgrims.

In America we have, as yet, no place con-

secrated by some startling display of what is called supernatural or miraculous power, to which the deeply devoted are accustomed to resort. This is a little odd when we consider how numerous are the followers of Rome, and how many hundreds of thousands, by all account, among us are believers in the marvels of modern Spiritualism. Notwithstanding the strides of positive Science, and the increasing hold that the developments of such science is obtaining on the educated in modern society, there are very many intelligent and cultivated people—we find them in all the walks of business and professional life—who cordially believe in the power of "mediums" to communicate with the spirits of the dead, and to receive advice or instruction from the "higher intelligences." We have met well-educated men and women who claim that they have received visits from ghostly persons, and have recognized departed friends in their shadowy outlines. Now, is all this but the effect of superstition—that relic of ancient ignorance

and barbarism—which the best of us have not yet altogether outgrown? Or is it, to some degree, the outgrowth of a principle which recognizes truth intuitively, and would make obeisance to it? Here, in practical, money-loving, speculative New York, the influence of superstitious fear has been evidenced in a striking manner very recently. The house in which Mr. Benjamin Nathan was murdered, two or three years ago, although a large and elegant mansion, and in a favorite quarter of the city, has been tenantless since the murder—no one being found bold enough to purchase or to rent it, although the price and terms were far below the current rates for like property elsewhere. Now, the managers of the estate are actually taking down the walls, with a view to building what they may term another house, and so remove the reproach of blood which prevents a very valuable property from being utilized. This seems ridiculous enough, at first notice; but we would venture to affirm that not one of our readers would care to live in a house so branded, could he have it rent free. Were the offer made, the answer would probably be after this fashion: “I am not *afraid* to do it, but, somehow, I don’t like to.” There’s a ghost looming up in the horizon of imagination which awakens strange notions—unnameable, unformed.

We are told, and we know, that there are men who seldom go to church, who never

pray, whose religious life is substantial *nil*, according to what is commonly regarded a religious life, and who yet consult wizards and witches, and direct their business according to the advice of mountebank star-gazers and jugglers. Large incomes are made in our cities by fortune-tellers of high and low pretensions, and some of those fortune-tellers are consulted and fed by men whose business transactions run up among the millions!

But the superstition which leads men to partake of such jugglery is really an outgrowth—distorted, misapplied, it is true—of their spiritual nature. All such men have neglected the normal development of the crowning elements of their manhood; and where should be found the fruits and flowers of an assured trust in God, exist only the weeds and nettles of doubt and unbelief.

As it is unbelief, irreligion, which lies at the foundation of superstitious fears, and of a hankering for the marvelous and supernatural, so it is an earnest, devotional sentiment, of the calm and assured type—a strong faith in the God of the New Testament—which will disarm superstition. Where there is an humble trust in the mercies and promises of our heavenly Father, there is an unshaken intelligence, a heart that responds not to the dolorous threatenings of bigotry or asceticism, but hears resounding within his soul: “Cast thy burden upon the Lord and he shall sustain thee; he shall never suffer the righteous to be moved.”

RELIGIOUS SERVICES IN PRISONS.

IF religion be good for any, why not for criminals? Indeed, we may suppose the miserable sinners confined within prison walls to be even more in need of the consolations of the Gospel than those more fashionable “miserable sinners” who have their liberty, their library, and who dress in broadcloth and in fine silks and satins.

No one is *all* bad—no one is *all* good. The man now behind the iron bars may have but a single fault, and that fault may be an almost irresistible desire for “drink,” and this may be inherited from father or mother. It was when under the influence of “drink” the poor, weak fellow lost his temper—which better men sometimes do—and, by a blow

with fist, club, or knife, committed an act which consigned him to the penitentiary. Aside from an ungovernable temper, he may be a good sort of fellow, and as kind, as loving, and as prayerful as his keeper or his chaplain. He enjoys religious exercises, and to him they become as much a means of grace as to those more favored.

The *Prisoner's Friend* publishes a letter from Mr. John Creighton, warden of the penitentiary at Kingston, Canada, from which we copy:

“Our convicts are divided into two classes, Protestants and Roman Catholics. A chaplain is appointed for each class, who receives a salary of \$1,200 per annum. Two suitable

chapels are provided, in one of which all the Catholics worship together, and in the other the Protestants. There is a short service in each every morning immediately before breakfast and before the convicts go to work. On Wednesdays, after dinner, there is also a short service, and on Sundays there are two, one immediately after 9 o'clock, and the other about half-past 1 o'clock. The sacrament of the communion is also dispensed at the proper seasons. There is an organ in each chapel, played by a convict, and there is also an excellent choir, formed from among the convicts, who are allowed suitable time to practice. The choirs are, I believe, superior to any church choirs in the adjoining city. The silent system prevails here, but the men are supplied with books, and are always permitted to join in singing God's praise.

"Besides these more public services, the Protestant and Catholic chaplains are required to be diligent in seeing and conversing with the convicts at all reasonable times, in their cells or in the hospitals and chapels, and in administering to them such instructions and exhortations as may be calculated to promote their spiritual welfare, their moral reformation, and due obedience to the rules and authorities of the prison. They visit daily those convicts who are sick. In the Catholic chapel the priest has assistants, just as in a cathedral. The convicts under his charge have not only the benefit of the mass, but also of instruction in the catechism, the beads, litanies, etc. There is also a large library of Catholic books, religious and secu-

lar, and an annual appropriation is made for the purchase of new supplies. [Is not this the same in the Protestant department?]

"In fact, we find by experience that if convicts can be made good Protestants or good Catholics, as the case may be, they will not subject themselves to recommitment to the penitentiary. We find no difficulty whatever in carrying out the various religious services and exercises. The convicts behave just as decorously in chapel as any religious congregation outside. In Canada we have a mixed community of Protestants and Roman Catholics, and the government, I think, acts very wisely in extending to every man, whether in or out of prison, the same religious privileges, and civil also, where he is in a position to exercise them. This does away with all sectarian bickerings, which are generally the most irritating."

[We suppose no special provision is made for Jews, pagans, or others; nor is it necessary. Indeed, *we* think religion, pure and undefiled by any sort of sectarianism, would fill all the requirements and save half the expense. Why not have such services as the singing, praying, preaching, and instruction of unsectarian Sunday-schools; they would be the thing to make prisoners penitent, and open their hearts to the reception of light from on high. May God put it into the minds of men to treat these convicts as though it were possible for them to be reformed, improved, made into respectable citizens, and even Christianized! Have they not souls to be saved? We do not know a better field for Christian missionary work than in our jails, prisons, and penitentiaries.]

--- OBERLIN COLLEGE.

AS a pioneer in educational and Christian reform, Oberlin College has been widely known for more than a generation. Its plan, a novel one, was conceived by the Rev. John J. Shepherd, who, however, had associated with him in its development P. P. Stewart, the inventor of the Stewart stove. The leading feature of this plan was the aim to bring a collegiate education within the reach of the youth of both sexes whose means were limited—in short, to popularize education. The plan, in this its prominent feature, has

been most successfully carried into execution. Probably in no school elsewhere can so good an education be obtained at a less expense. Many students have literally *worked* their way through college, maintaining themselves wholly by their earnings. Some find work of various kinds to do; advanced students teach elementary studies in the preparatory department, and many avail themselves of the long winter vacation of three months to teach in public schools.

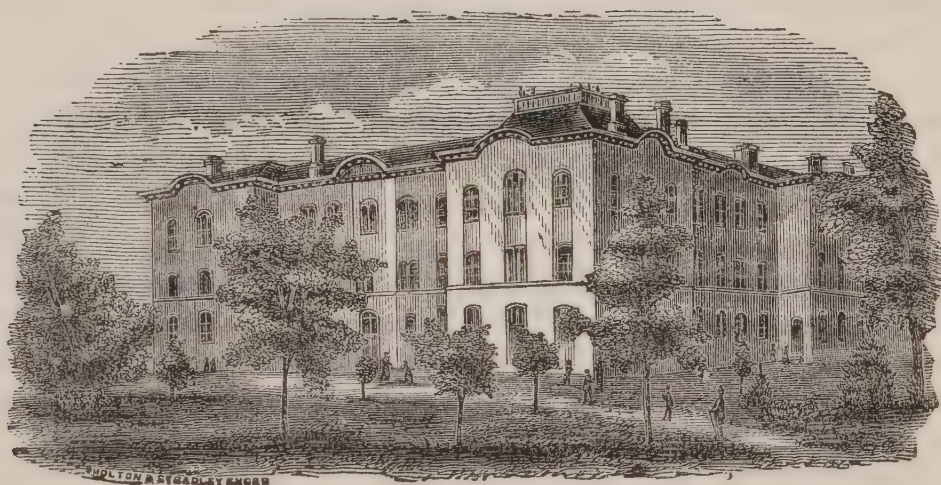
But it would be wrong to infer, as some

have done, that in popularizing education Oberlin has lowered the standard of a liberal education. The course of study pursued at Oberlin is substantially the same as in colleges of the first rank, and the instruction given is thorough, yet the education imparted is not a mere scholastic or book education. Mind and heart are harmoniously developed. Reason is allowed its legitimate exercise, and so Oberlin has been characterized by an activity and profundity of thought, united with a positiveness and persistence of correspondent action, which few collegiate institutions can claim.

The original plan contemplated the co-existence of the college and a Christian colony in full sympathy with it; accordingly, the two began together in the woods, and have continued to this day as one. From its beginning Oberlin has been deeply religious. This

formal, stiff, and forbidding. It is also rational, and not merely traditional and dogmatic. Nor is it sectarian. As personal, it is not a mere party religion. Its spirit is catholic. Christian union has been in Oberlin a fact. Till the growth of the town and of the school rendered it no longer practicable, there was but one church, in which were united members of all evangelical Christian denominations. The confession of faith was brief, comprising only what were deemed the essential doctrines of Christianity, and the same confession is still retained in the two congregational churches.

This religion is *practical*. It is a working religion, producing fruit. Oberlin students have been widely known as active, earnest, and efficient workers. It is the religion of *love*. The distinctive religious philosophy of Oberlin—born of the heart and mind of



NEW COUNCIL HALL, OBERLIN COLLEGE.

has always been the pervading and reigning spirit of the school and of the place. The aim has been to keep human learning subservient to the knowledge of God and to a true Christian life. The religion of Oberlin is of the modern evangelical type, and in this, as in many other respects, it was a pioneer. Some characteristics of this modern type of piety may be mentioned. Its spirit is all-pervasive. It is an every-day religion. It enters into all pursuits, and is the controlling principle of the whole life. In the school at Oberlin every recitation is opened with a religious exercise, either prayer or singing; and all public meetings or lectures, even those not of a strictly religious character, are opened with prayer. This religion, as of the heart, is natural and easy, and not

the Rev. Charles G. Finney, for many years its honored president, and matured, systematized, and put into compact form by his successor, the Rev. James H. Fairchild—is the philosophy of love. This is, that love, benevolence, or the willing of the good of universal sentient being is the true virtue, moral goodness, or righteousness. This religion or philosophy of love, heartily accepted, carries one out of himself, and makes him consecrated in all that he is, has, and can do to the good of his fellow-men. The teachers who have conducted the school have been inspired by this spirit of self-sacrificing devotion, leading them to labor contentedly and joyfully on meager salaries; and the same true Christian heroism they have imparted to many of their pupils, who have

gone forth far and wide to extend and perpetuate it.

SEX IN EDUCATION.

The problem of the co-education of the sexes has been solved in Oberlin College to the entire satisfaction of all who have watched the workings of the long-tried experiment. This success has doubtless been facilitated by the pervading religious spirit; but it is unquestionable that the mutual influence of the sexes has contributed largely both to success in study and to the formation of a genuine manly and womanly character. President Fairchild, after he had been a teacher of young men and young ladies together for twenty-seven years—the first eight in Latin, Greek, and Hebrew, the next eleven in the higher mathematics, and the last eight in philosophical and ethical studies—makes these emphatic statements: "In all these studies my classes have included young women as well as young men, and I have never observed any difference between them in performance in the recitation. The strong and the weak scholars are equally distributed between the sexes. . . . Nor is there any manifest inability on the part of young women to endure the required labor. A breaking down in health does not appear to be more frequent with them than with young men. We have not observed a more frequent interruption of study on this account; nor do our statistics show a greater draft upon the vital forces in the case of those who have completed the full college course."

The existence of Oberlin began about the same time as the anti-slavery agitation; and in its second year, by the casting vote of the chairman of its trustees, a resolution was passed, "Let students be received irrespective of color," thus making it an anti-slavery school of the most pronounced type, a character it has always maintained, and by which, because of the prominence of the subject, it has most of all gained conspicuity. The negro has been treated as a man, and accorded all the rights and privileges of his manhood; yet the number of colored students has been comparatively small, the ratio being but about four or five per cent. "Most of these," says President Fairchild, "have occupied a fair position among their fellows in scholarly attainment and cultivation. It might

be safe to say of one of them that he has had no superior in literary taste or in ability as a linguist. Others have excelled in other departments of study."

It was but natural that the war, which was the providential issue and the final settlement of the long-continued previous agitation, should find Oberlin ready for its extraordinary demand. "Of one hundred and sixty names," says Professor Ellis, "in the four college classes in 1861, more than one hundred were connected with the army as soldiers. Of the alumni and under-graduates we count one hundred and ninety-eight who served in the army. Among these were three major-generals, three brigadier-generals, ten colonels, and officers of lower grade in proportion." Prof. E. estimates that there were seven hundred and fifty representatives of Oberlin in the army, "the great majority of whom enlisted without a selfish consideration." "The work among the freedmen," he adds, "opened by the war, seemed to have special claims upon the students here, and has been responded to by a large number of teachers and a number of ministers. The American missionary association, which has devoted its attention especially to this work, has its three principal secretaries from Oberlin graduates, and looks to Oberlin for many of the laborers which it sends into the field. The work of Oberlin for the colored race seems only just begun."

Since the war, under the judicious and able management of its president, Rev. James H. Fairchild, who is favorably known alike at the east and in the west, the college has entered upon a career of prosperity greater than at any previous time. The number of students has been growing steadily larger, and new plans have been formed, and are being realized, for increasing the efficiency of the institution. The theological department, which a few years since was reduced quite low, has been revived and much increased, and its prospects are now bright. This was heartily indorsed three years since by the national council of congregational churches which met at Oberlin, and on that occasion the corner stone of a new theological building, to be called Council Hall, was laid, which has since risen to ample proportions, is now nearly completed, and is the finest structure

in the village. At the Commencement last summer Senator Sherman remarked that it was a puzzle to him how Oberlin had accomplished so great a work with such meager resources. It has been by faith and in love, and by the help of God, rather than by money. But its growth renders its needs many and pressing.

GOOD REGULATIONS.

Students are generally of the middle class, and are well-behaved. Cases of discipline are rare. Secret societies, games of chance, and the use of tobacco in any form, and of intoxicating liquors, are strictly forbidden. Careful attention is given to the morals of the students, and a due solicitude is felt for their piety. In the estimation of true manhood the supreme place is given to moral character. More than in most places a man is esteemed for what he is as a *man*.

Of the alumni of Oberlin College most occupy stations of usefulness. A large number have become ministers, missionaries, and teachers; but many have also become lawyers and editors, and some physicians, business men, and farmers. Eight are presidents of colleges, over thirty are professors in colleges, several are superintendents and principals of important schools, and sixteen are editors. A few have attained distinction in public affairs. Hon. James Monroe, a graduate of the college, and for many years a professor in it, served during the administration of President Lincoln as Minister to Brazil, and since his return has been a member of Congress. General Cox, who in the war achieved a national reputation, and was for a time a member of the cabinet, is a son of Oberlin. Henry E. Peck, for many years a professor in the college, was sent by Lincoln as Minister to Hayti, where he died. John M. Langston, professor of law in Howard University, is a conspicuous example of what Oberlin has done for the colored man. Oberlin men have been rather workers than writers, yet they have made some not unimportant contributions to the permanent literature of the country. Rev. Asa Mahan, the first president of the college, is well known as the author of several books of a metaphysical and religious character. President Finney is the author of a large, able, and original treatise on Systematic Theology, which

has been republished in England, and also of a book containing a series of revival lectures, which has had an extensive circulation in this country and in Europe. President Fairchild, by his text-book on Moral Philosophy, has taken rank among the best writers on that subject. Professor Henry Cowles is the author of several excellent Commentaries, chiefly on the Old Testament.

Oberlin has thus been a growing moral power. It has disarmed prejudice, and has compelled the admiration and hearty appreciation of many who have doubted, if they have not opposed it. The fundamental principles which it so courageously, and with prophetic insight, adopted and has maintained—which it has so fully embodied in its spirit and aim, and so efficiently promoted with the heroism of faith and self-sacrifice—have, in God's good providence, become gloriously triumphant; and Oberlin, together with all who were also true to them, shares their exaltation. The pioneer work of Oberlin is indeed done, and well done; but who shall say that its greatest work is not yet before it?

H. MATSON.

RESOLUTION AND APPETITE.

A WRITER in the *Saturday Gazette*, in discussing the subject of intemperance, says thus warmly on the ever-fruitful subject:

The first lecture we ever heard was what they called a "Washingtonian." He was not one of your elegant and eloquent modern lecturers, with immaculate linen and patent-leather boots, but a sturdy, sun-browned, weather-beaten fellow, clad in home-spun, who had once been a drunkard, but had now been reclaimed. He took off his coat and rolled up his sleeves (it was in the fiercest heat of August), and he gesticulated and vociferated with a vehemence betokening a personal animosity against the demon that had formerly enslaved him. We listened with ears erect to the touching story of his ruin and his rescue. We were filled with his feeling, and when, at the close, he called for signers to a pledge of total abstinence, we were proud and happy to go forward to the little pine table in front of the pulpit, and, remembering John Hancock and the Declara-

tion of Independence, we wrote our names as near like as possible, and with a resolve which was quite as high as his, at least according to our boyish measure. For that day's deed we have more and more occasion to give God thanks. "Amid temptations sharp and strong," especially in college life, where boys learn much besides what is taught in books, that pledge held like an anchor. When, a few years ago, we heard that one of our earliest "chums" had gone down to a drunkard's grave, we thanked God afresh for the pledge that we took, and for the grace He has given us to keep it until now.

In the enthusiasm of our earlier years we were led to hope, and in many a speech we declared it, that at no distant day, intemperance, with all its hideous brood of evils, would be eradicated from the land. We are not so hopeful now, perhaps because we are not so young.

We have witnessed the rise and decadence of all manner of temperance organizations, with banners and badges, and signs and pass-words. We have watched the progress of moral-suasion movements, and have seen the arm of the law invoked to stay the tide of desolation. Much has been done; we would not disparage the work or the workers. But ghastly facts confront and appall us. The evils we deplore still exist, and seem to be spreading with fearful augmenting power.

In this Christian city where we write, there is a dram-shop for every lamp-post, and we are no better, or, rather, no worse provided in this regard than many other cities on the continent. These dram-shops are thronged with thirsty customers. Whether gold and stocks are up or down; whether other sorts of business be brisk or dull, these hells are always full. And in the social circle, yea, in many a circle reputed to be Christian, we think we have discovered a downward drift, a tendency to revive the drinking customs of a day which we had hoped was gone forever. Christian men, and even Christian ministers in some latitudes, as we happen to know, for we have been there, allow themselves to indulge in potations which, fifteen years ago, they would not have dared to touch. Perhaps the war is responsible in a large degree for this deplorable demoraliza-

tion. We retract. It is too much the custom to dodge responsibility—as Adam did when he charged it upon Eve, and Eve when she charged it upon the devil—we are responsible for allowing such demoralization, and, perhaps, contribute to it by the force of our example. We appeal to Sunday-school officers and teachers to consider this question as its terrible importance demands, and begin the work of reformation by making "straight paths for their feet, lest that which is lame be turned out of the way."

And then, let every Sunday-school include a "Total Abstinence Society," and let that society include every member of the school. The more excellent way is to prevent the formation of the habit. Marshal the children under the temperance banner. Dry up the stream at the fountain-head. It costs no sacrifice, it requires no effort for a child to renounce a cup it has never learned to love.

Let temperance books find a place in every Sunday-school library. At stated periods let the subject be publicly presented, and let the choicest talent be invoked to make the presentation thoroughly effective. Let the pledge be circulated, and get all the school to sign it; and our word for it, within twenty years, there will be a moral revolution that will change the whole aspect of society. Fellow-workers, will you try it?

[So far so good. But why not extend the work of pledging to every-day schools? Our school teachers are—the great majority of them—in favor of temperance, and will cheerfully co-operate in forming temperance societies in their schools. Editors of school or educational journals can do good by directing attention to this work. The entire Christian church throughout the world *ought* to help. Clergymen who fail to second this enterprise come just so much short of performing fully their high and holy function of leading the people "onward and upward."



CHURCH COLLECTIONS—HOW TO INCREASE THEM.—Let preacher and people stop the use of tobacco, which is in every sense a wasteful nuisance, and put the money they would have paid for the "weed" into the contribution-box. It would soon pay off church

debts, pay for an "organ," increase a clergyman's salary, buy books for the Sunday-school library, and leave something for charity, missions, and other religious enterprises. All this, simply by a little self-denial—not meritorious—of a worthless or injurious narcotic, which *usually* preceeds tippling.

WAS JESUS A BLONDE?

EDITOR PHRENOLOGICAL JOURNAL—

I READ with curious interest your article on "The Ideal of Christ's Person." It is a question badly complicated, because the Jesus of our religious systems is an ideal rather than an actual personage. Even in the Gospels he is endowed with characteristics as little Jewish as can be conceived. Human character is based on the natural constitution, the physique; and Jesus is delineated as a man having the qualities of the blonde Caucasian race. I will copy from Bodichon the characteristics of the fair and brown Caucasians, to facilitate conclusions:

BLONDE.	BRUNE.
Head large, elongated;	Head small, round;
Eyes blue; hair blonde;	Eyes black or brown; hair black or red;
Stature tall; skin fair;	Stature short; brown skin;
In love, inclined to sentiment;	In love, of sensual disposition;
Disposed to political unity;	Averse to great states; partial to cantons;
Fond of travel and adventure;	Tenacious of home, little adventurous;
Prone to settle where are great facilities of communication;	Disposed to live in mountainous and island countries; fond of mining;
Impetuous, unreserved, frank;	Cautious, uncommunicative, secretive;
Fond of noise, talking, good eating;	Silent, ascetic;
Fond of novelties, ameliorations;	Holding to precedent and old usages;
Inconstant, impetuous, forgiving;	Repugnant to strangers, vindictive;
Sympathetic, seeking new ends;	Unsympathetic, persistent;
Producing savans, reformers, sages;	Producing orators, warriors, artists, poets;
Aristocratic, and giving political influence to women.	Democratic, according little influence to women.

The Jesus of the Synoptic Gospels (Matthew, Mark, and Luke) was endowed with the principal qualities peculiar to the blonde. He was certainly nomadic in his inclinations, fond of the society of women, "eating and drinking," impetuous, unreserved, sympathetic. In most respects he was the opposite of the Apostle Paul, whom tradition makes of dwarfish stature, sallow complexion, ascetic, holding unspiritual views of marriage, unsympathetic, persevering. His character and individuality are stamped on the Christian church, as is that of Mohammed upon Islam.

Though entering Jerusalem as "King of the Jews," we find no evidence that Jesus dis-

played any of the policy or fanaticism of the Jewish zealots, as described by Tacitus or Josephus; making no sedition, or in any way providing even for personal safety. "Render to Cæsar the things that are Cæsar's," and "Ye saw me in the temple making no tumult," are his testimonies in regard to politics; and he paid the half-shekel, also, of the Jewish law. The Pharisees, Persian Jews, were most friendly to him; the Sadducees, or sacerdotal party, were his adversaries and betrayers. If race controls the matter, Jesus must be presumed to have been of the branch of Jews most Persian or Aryan in character.

It is not to be supposed that the Hebrew is a purely Semitic people. By their own records they intermarried with Egyptians, Canaanites, and other populations, as the Normans did with the Saxon, Belgic, and other inhabitants of England. In Galilee such intermarriage was most frequent; and tribes of the Aryan or blonde race lived not remote from that province. Jesus was very possibly the offspring of such intermixture of blood. His mental character denotes it; and there is no great improbability in the hypothesis. Jews with blue eyes and flaxen hair are found in England; and red-haired in Germany. Tradition gives red hair to Moses, as to the Hyksos kings of Egypt, and to Esau, the son of Isaac, and to King David. (*Genesis* xxv. 25; 1 *Samuel* xvi. 12.)

I attach no importance to the letter of Lentulus, which describes Jesus as tall, with hair waving, bright and resplendent in color, etc. The old heads of Christ were but heads of Serapis, which were scattered by the Gnostic sects over all Europe. The Emperor Hadrian wrote thus: "They who worship Serapis are also Christians; those who style themselves the bishops of Christ are devoted to Serapis." The ideal divinities, Apollo, Venus, Diana, Athéné, were golden-haired. I have seen in Montreal pictures of Cleopatra, the fabulous asp and all, in the same gallery, one a brune, dark-haired, lithe, etc.; the other, yellow-haired, huge-bellied, with prodigious trunk and arms, a thorough-going Dutch woman. Like dispositions to ideal representation doubtless account for the various delineations of Jesus. I conceive of him as tall, not quite six feet high, fair and somewhat florid countenance, a hazel-eyed, fair-haired, well-formed body; soft, uncalled hands; full-sized nose mouth, and chin, large chest; and with a careful reading of the Synoptic Gospels it seems as though everybody would apprehend the same ideas.

A. W.

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

FINANCE—A CATECHISM ON MONEY.

BY JOHN G. DREW, ELIZABETH, N. J.*

“WHAT constitutes a State?

Not high-raised battlements or labor'd mound,
Thick wall or moated gate;
Not cities proud, with spires and turrets crowned;
Not bays and broad-arm'd ports,
Where, laughing at the storm, rich navies ride;
Not starr'd and spangled courts,
Where low-brow'd baseness wafts perfume to pride.
No; Men! high-minded Men!
Men who their duties know;
But *know their rights, and, knowing, dare maintain!*”

QUERY. What is money?

Answer. George Opdyke defines it as “an instrument of commerce to effect exchanges;” Charles Sears styles it as a “common title to float property from hand to hand, as canals do from place to place;” and a labor reformer tersely calls it a “baggage-check for the transfer of property.” All of which definitions mean the same thing, and are correct.

Q. What should be the characteristics of money?

A. 1. *Security*, that it may never fail of exchangeability for equal values.

2. *Stability*, that it may not be elevated or depressed by outside influences.

3. *Uniformity* of value in every part of our country.

4. *Elasticity*, capable by its inherent power of adapting itself to any requirement.

5. *Cheapness*, that the average cost of its use shall not exceed the average value of its service.

6. *Volume*, equal to any conceivable emergency.

7. *Convertibility* into such form as shall be perfectly safe, and subject to satisfactory conversion on demand.

Q. Is our present currency SECURE?

A. Yes; as it is based upon the wealth and production of the nation, and the people know it, as evinced by their hoarding it in

seasons of panic, which they have never done before. This view was confirmed by the President; who, though a bullionist, in his message, at the opening of the 43d Congress, (Dec. 2d, 1873), said: “The experience of the present panic has proved that the currency of the country, based as it is upon the credit of the country, is the best that has ever been devised. Usually, in times of such trials, currency has become worthless, or so much depreciated in value as to inflate the values of all the necessities of life. As compared with the currency, every one holding it has been anxious to dispose of it on any terms. Now, we witness the reverse. Holders of currency hoard it as they *did gold* in former experiences of a like nature.”

Q. Was not our former currency equally secure?

A. No; as that was based upon specie—a commodity which, being a debtor nation, we could not control; and when the foreign balance of account was against us, and our creditors wanted it, they took it. The foundation being thus withdrawn, the superstructure tumbled.

Q. What do you mean by the foreign balance of account?

A. Should we sell enough to the foreigners to more than pay their claims for goods, interest, freight (as they now own most of the ocean shipping), the “balance of account,” payable in gold, would be in our favor. At present, and for many years past, the reverse has been largely the fact.

* “Our Currency; What It Is, and What It Should Be.” Octavo; pp. 24. Price, 15 cents, single (post-paid); \$12.00 per hundred; \$100.00 per thousand. S. R. Wells, Publisher: 389 Broadway, New York.

Q. You argue, if I understand you correctly, that the fact of gold being the international currency of the world is a powerful objection to its use, by this nation, as a basis for its currency; and not, as some insist, an argument in favor of such use?

A. Yes. It is an overwhelming and unanswerable objection, *so long as we remain a debtor nation; and no proposition is susceptible of clearer demonstration* than that any debtor nation that bases its currency upon specie, for the reasons before stated, prospers or languishes, financially and industrially, at the option of foreigners.

Q. Are not those who, like you, oppose a specie basis, entitled *inflationists*?

A. Yes; for the same reason that the thief, to mislead his pursuers, cries "Stop thief!" We boldly affirm that the full legal tender, as before described, backed as it will be by the wealth of the nation—\$30,000,000,000—and its yearly production of \$6,000,000,000, will be the most solid, well-secured currency ever known; and with equal boldness affirm that the proposition of the bullionists to base our currency on gold—*we being a debtor nation, and not owning one gold dollar—is the most bold and unblushing "confidence game" ever known*: a proposition to develop our entire production and commerce, not only upon no tangible foundation, but upon a *minus quantity*, a VACUITY, a SUCTION; as we owe, now, ten dollars in coin where we have but one to pay with, and *that one borrowed*.

Q. Are these views of finance held by parties in such influential positions as to assist in putting them into practice?

A. Yes. President Grant, in the message of December, 1873, before quoted, remarked: "A specie basis can not be reached and maintained until our exports, exclusive of gold, pay for our imports, interest due abroad, and other specie obligations, and so nearly so as to leave an appreciable accumulation of the precious metals in the country. * * * To increase our exports, sufficient currency is required to keep all the industries of the country employed. Without this, national as well as individual bankruptcy must ensue."

Q. Does history afford instances of nations similarly situated with ourselves, and their experience?

A. Yes; most copiously England—when

forced into the position of a debtor nation, as the result of her great wars—abandoned specie to her creditors, stimulated her industries as the President proposed, turned the foreign balances in her favor, and resumed. France pursued the same course after the termination of her late war with Germany: FORCED her legal tenders everywhere, and has now the balance of trade in her favor, and has almost recovered from her losses. President Grant doubtless learned a valuable lesson from those experiences.

Q. Does our present currency possess STABILITY, as you define it, "not elevated or depressed by outside influences?"

A. No. Being arbitrarily fixed in volume, regardless of the fluctuation of demand, it violently oscillates, in cost of use, from 1 per cent. per day, in the autumn, to $\frac{1}{1\frac{1}{5}0}$ of 1 per cent. per day, in midsummer—jumping like a steam-engine without governor or balance-wheel.

Q. Does the same trouble inhere with a specie basis, and in other countries?

A. Yes. In October, 1873, the rate of interest of the Bank of England jumped, in three weeks, from 3 to 10 per cent., and in the next three weeks tumbled back again. Without doubt, this jerky tendency of our currency prompted President Grant so wisely to say, in his message of December, 1869: "It is a duty, and one of the highest duties of Government, to secure to the citizens a medium of exchange of fixed, unvarying value." As the only *measurable* value a medium of exchange can have is the rent obtainable for its use, gold, as a basis, would be the worst of all materials, as that is the most vacillating—the value (?) fluctuating 333 per cent. in three weeks. One all-controlling reason why it is so largely advocated as a basis for currency in Wall Street, is the ease with which it can be "cornered."

Q. I will not ask on what you propose to base the nation's currency, as you have said, "The nation's wealth and its current production." You have not shown how that will prevent the violent oscillations you so much deplore.

A. It will not, unless some means can be instituted to fully supply the requirements for money in the active season, and to recall it when not needed. In other words, en-

dow our financial system with ELASTICITY, our fourth-named requisite—examination of which we will waive until after the discussion of *uniformity of value*.

Q. Has our present currency UNIFORMITY OF VALUE throughout the country?

A. Yes; without question. Therein presenting a marked contrast to that previously used, when travelers from State to State suffered the same loss and inconvenience that they do in Europe in passing from nation to nation.

Q. You quote ELASTICITY as an essential attribute; does our present currency possess it?

A. No. While we need greater elasticity than any other nation, our currency is less elastic.

Q. Why do we require greater elasticity than other nations?

A. Chiefly in consequence of our climate. Our summers are so hot that cereals would perish in transit; and our winters so cold as to freeze up our internal navigation. Therefore, our business is mostly done in the fall and spring months—especially in the fall. This condition of climate does not obtain in any other largely productive and commercial nation; and is accompanied, to an unparalleled extent, by a spasmodic demand for currency during the season for its active use. This active demand is followed by a directly opposite condition, and it will readily be seen that a volume of currency, sufficient to float the autumn's exchanges, would—unless some sluiceway should be prepared to carry off the surplus, when required—flood the market in the dull period, and thus produce the most disorganizing and vicious results.

Q. Suppose the nation should have only sufficient volume for the dullest period—what would occur when the fall demand should set in?

A. Collapse. An almost entire stoppage of production and movement of crops; ruinous rates for the use of money from day to day; temporary and absurd expedients, indicative of insolvency of the banks; societary demoralization.

Q. You speak with confidence and emphasis. Are these views largely accepted?

A. For years the secretaries of the Treas-

ury have been stating these theories as facts: and they are confirmed by the experience of last fall, and consequent present suffering. In fact, so evident were they that the President, in his message to Congress, Dec. 2d 1873, said: "In view of the great actual contraction that has taken place in the currency, and the comparative contraction continuously going on, due to the increase of population, increase of manufactures and all the industries, I do not believe that there is too much of it, now, for the dullest period of the year. * * * It is patent to the most casual observer that much more currency or money is required to transact the legitimate trade of the country during the fall and winter months, when the vast crops are being removed, than during the remainder of the year. With our present system the amount in the country remains the same throughout the entire year, resulting in an accumulation of all the surplus capital of the country at a few centers when not employed in the moving of crops. * * * Elasticity to our monetary system, therefore, is the object to be attained first. * * * Elasticity to our circulating medium, therefore, and just enough of it to transact the legitimate business of the country, and to keep all industries employed, is what is most to be desired."

Q. With so much evidently well-considered thought, did he propose any working plan to secure the desired results?

A. Yes; a well-intentioned plan, but open to the objections: 1st. That the volume of currency proposed was too small; 2d. It was to flow through the complicated and costly agency of the banks, instead of directly to the people; and, 3d. The proposed rate of interest (4 per cent., gold) is higher than our production, and, consequently, our commerce could afford.

Q. What was his plan?

A. I quote from his message thus: "I would submit for your consideration whether this difficulty might not be overcome by authorizing the Secretary of the Treasury to issue, at any time, to National Banks of issue, any amount of their notes below a fixed percentage of their issue—say 40 per cent.—upon the banks depositing with the Treasurer of the United States an amount of Government

bonds equal to the amount of notes demanded—the banks to forfeit to the Government, say 4 per cent. of the interest accruing on the bonds so pledged, during the time they remain with the Treasury as security for the increased circulation, the bonds so pledged to be redeemable by the banks at their pleasure, either in whole or in part, by returning their own bills for cancellation to an amount equal to the face of the bonds withdrawn." Which, being translated to the language of common people, would read thus: The Government to advance to the National Banks an amount equal to 40 per cent. of their circulation, and to receive, as collateral security for the same, an amount of Government bonds equal to the sum so advanced—the banks paying the Government at the rate of 4 per cent. per year, and to repay the loan at their option. This would give, as an automatic reserve fund (40 per cent. on the present circulation of \$354,000,000), \$141,600,000.

Q. What improvement on this would you suggest?

A. Let Congress pass a very simple, and, therefore, easily-understood law, *providing for the issue of Treasury notes (greenbacks) as legal tender for all purposes whatever, to the extent which the requirements of our production and commerce indicate, and make such legal tender reconvertible, at the option of the holders, into Treasury bonds, bearing a rate of interest not much in excess of the average annual national increase of property—not over 3.65 per cent. per year.*

Q. You said that the production of the nation could not afford to pay 4 per cent., gold. What can it afford?

A. That brings us squarely to the elucidation of the 5th requisite: CHEAPNESS. Whatever might be the faults of Dickens' Mr. Micawber, he gave us one indisputable lesson in political economy, thus: 1st. Given a revenue of £19 19s. 6d.; expenditures, £20; result: *misery*. 2d. Given a revenue of £20; expenditures, £19 19s. 6d.; result: *happiness*. Statistics show the productive increase of our industries, for a series of years, to be $3\frac{1}{2}$ per cent., without allowing labor any profit for the direction of the use of money. Should the cost of the use of money be above the earnings of industry, recurrence of the panics, insolvencies, individual and national

ruin, so characteristic of the past, would only be a question of time in the future.

Q. A much larger VOLUME would then be required?

A. Yes. "Equal to any conceivable emergency."

Q. Entirely without limit?

A. I did not say that. A preceding statement proposed "to the extent which the requirements of our production and commerce should indicate."

Q. That seems very vague. How do those requirements indicate themselves?

A. By the amount of rent or interest which the use of the "instrument of commerce to effect exchanges" (as Mr. Opdyke so well defines money) commands in the market.

Q. Really, I am so obtuse that I can not comprehend your statement.

A. I showed, in a previous response, that the production of the country for a series of years had been $3\frac{1}{2}$ per cent. With that as revenue, and 15 to 20 per cent. interest, it is entirely evident that production must very soon be crushed; and it is equally evident that a healthy and sustained existence of Production, and its co-worker, Commerce, is incompatible with a higher rate than about 3 per cent. The market rate of interest is, therefore, as unerring and automatic an indicator as to the proportion which the available supply of money bears to the demand, as the barometer is of the pressure of the atmosphere.

Q. So far, you have demonstrated to my satisfaction that the condition of the money market, as to supply and demand, is indicated by the figures of interest, as in your illustration of the barometer; which, at one point, indicates equilibrium (analogous to your $3\frac{1}{2}$ per cent.), and variations from the same—disturbance, either present or near at hand. Will you please explain, having thus discovered a threatened disturbance, how you will avoid it?

A. I repeat: Let Congress pass a very simple, and, therefore, easily-understood law, *providing for the issue of Treasury notes (greenbacks) as legal tender for all purposes whatever, to the extent which the requirements of our production and commerce indicate, and make such legal tender reconvertible, at the option of the holders, into Treasury bonds, bear-*

ing a rate of interest not much in excess of the average annual national increase of property—not over 3.65 per cent. per year. Suppose the liabilities of the Government to be very largely of the above-described currency bonds, payable on demand, bearing not over 3.65 per cent. per year interest, held by our own citizens (instead of gold bonds, at high rates, held by foreigners), do you not see that when the rate of interest should advance, above the Government figure, holders would rush to convert them into currency? and when a plethoric supply should be indicated, by the rate of interest being below the Government standard, the currency would flow to the Treasury, until the equilibrium should be re-established?

Q. In solving this problem, are you not making it possible for the Government for the first time to obey the requirement of the Constitution to “coin money and regulate the value thereof?”

A. Certainly; and in the only possible way “to regulate the value of money;” which is in the rate of the rent or interest obtainable for it.

Q. In your response to my query, immediately preceding the last, you founded your argument on the premise that the liabilities of the Government were largely in the low-interest, convertible currency bonds. Until you firmly establish your premise, your argument is without foundation.

A. That condition does not exist; but the materials for it only await the demand of the American people, who, while I am writing this, are demanding, throughout the West and South, that “The public debt, of whatever kind, should be paid in strict accordance with the law under which it was contracted.” That means that the 5-20 bonds—principal payable after five, and before twenty years, at the option of the Government, exempt from taxes—national, State, or municipal—and bearing 6 per cent. per year gold interest, payable semi-annually—should now, by their terms, be called in and paid off in legal tenders; said legal tenders to be convertible into bonds, as before described. This gives the currency the now-lacking characteristic of CONVERTIBILITY.

Q. But, is not that *repudiation*, in view of the fact that the first act signed by Mr.

Grant, as President, having been passed by the Forty first Congress, on the 18th day of March, 1869, read as follows: “It is hereby provided and declared that the faith of the United States is solemnly pledged to the payment, in coin or its equivalent, of all the obligations of the United States, and of all the interest-bearing obligations, except in cases where the law, authorizing the issue of any such obligations, has expressly provided that the same may be paid in lawful money, or in other currency than gold and silver?”

A. It is NOT REPUDIATION, unless we construe George Washington’s decision—annulling the agreement of General Arnold to deliver West Point to the armies of George III.—as repudiation. Both parties—Arnold and our Congress—exceeded the limits of the service for which they were appointed. Unlike the acts authorizing the issue of bonds, the principal of which was payable in gold, this only stipulated the interest. I knew none of the buyers of those bonds (5-20’s), when they were issued, who thought of receiving gold for anything but the interest. The greenbacks of that date were, and now are, indorsed as “legal tender, at face value, for all debts, public and private, EXCEPT duties on imports and interest on the public debt.” Thaddeus Stevens (*who drew the bill*) repeatedly asserted, in his place in Congress, that the framers of the bill had no thought of gold payment, except for interest. The bill was drawn and the contracts (bonds) delivered, on one part, by a nation hard pressed for its existence, receiving a small (sometimes as low as 35) percentage; and grasping money-powers, on both sides of the ocean, accustomed to use the closest scrutiny, taking the carefully-drawn contract, on the other part. That act, substituting gold for currency in payment of the principal of the 5-20 bonds, was an after-thought, and passed by a Congress composed largely, if not chiefly, of men who would profit by its enactment—either directly, as holders of those bonds, or indirectly, as being interested in National Banks. By thus subverting their fiduciary position to their own interests, and against the interests of their constituents and the nation, they acted—to use the mildest terms—indelicately, unwarrantably, and, we think, illegally. Their action contained all the

bad elements of the "Salary Grab" and the "Credit Mobilier," with infinitely more of mischief to the nation. The plea of necessity had disappeared; the nation had passed its crisis; and the appreciation of its credit was clearly indicated by the advancing prices of its bonds. Our industries were never so productive; and, if *empirical tinkers* had not meddled, we should, before now, have had

the balance of trade in our favor, and specie basis, if deemed advisable, would have been possible. It was *special, class legislation against production, and, consequently, against commerce and transportation, in favor of our chartered money monopolies and gold operators.* IT WAS UNCONSTITUTIONAL, being—1st. EX POST FACTO. 2d. AS IMPAIRING THE OBLIGATION OF CONTRACTS



THOMAS A. SCOTT,

PRESIDENT OF THE PENNSYLVANIA RAILROAD, ETC.

VERY few of our readers, it is reasonable to believe, have not heard of the enterprising, progressive, bold railroad man whose portrait graces this page. For the

past five or more years his name has had a more important influence in railway movements than that of any other man we might name. Considered from the point of view

of the engraving, he has an organization as healthy and vigorous as may be desired. His brain is large, and amply sustained by an excellent body. He inherits enough of his mother's nature to give him an intuitive intellect which grasps conclusions quickly, and generally his first impressions are his best. His large perceptive organs, giving him fullness across the brows, enable him to look after details and appreciate particulars; and though he has comprehensiveness of thought and breadth of plan and purpose, nothing is too small to attract his attention and awaken his consideration. He is wide through the temples, showing excellent constructing or combining talent. He would have made one of the best of mechanics or engineers, had he taken up such a vocation. He is wide-headed just back of the temples, where the hair covers the scalp in the region of Acquisitiveness, showing power to appreciate values and comprehend combinations in money matters. He has remarkable quickness in taking in all the facts and principles involved in a large financial operation.

He is wide between the ears, showing power, force, courage, fortitude, enterprise, push, and ability to control and govern affairs. He is not one of those serene, touch-me-not kind of men, that sit in solitary grandeur and quietly direct affairs. He goes among men, sees for himself, instructs those who control the work in detail, and thus will have, as it were, his hand, or mind, on every man in the whole sphere of his business.

The upper part of his forehead is sufficiently strong to give him reasoning power, but he is more practical than philosophical. He sees the drift of large enterprises, but his power lies in reducing to practice that which is not easy to be done.

He has strong social developments; makes friends by the touch of his hand, by the tone of his voice; is a good talker, but comes to the point without a world of words, states

his case in a crisp and vigorous manner, and stops when he gets through.

He has Hope enough to see results more clearly than most men; believes in great possibilities, and dares to try that which would appall most others; when he goes among men who have doubts and misgivings he is able to inspire them with a consciousness of coming success, and thus he becomes a great factor in the accomplishment of gigantic objects. He is able to call out in others all that belongs to their character, especially their power, and lead them to co-operate with him heartily and effectively. He comprehends strangers, knows at once how much there is in a man, and how to bring it out; knows how to inspire individual confidence and to make people believe in him, not in the facilities which he may have—he impresses people with an idea that whatever he undertakes is somehow going through. He has a great deal of what may be called vital magnetism, personal influence, power over others, ability to call out their affection, their talent, their courage, and their persistency, and, at the same time, he is able to control strong men. In fine, he is a natural king or leader among men.

"COL." SCOTT, as he is generally styled, was born in Loudon, Franklin County, Pennsylvania, December 28, 1824. After serving as a clerk in several country stores, he became the clerk of Major James Patton, his brother-in-law, who was collector of tolls at Columbia, on the State road. He next became a clerk in the extensive warehouse and commission establishment of the Leeches, at Columbia. In 1847 he left this position to go to Philadelphia, where he had been offered a situation as chief clerk to A. Boyd Cummings, the collector of tolls at the eastern terminus of the public works. After three years of service in that relation, he availed himself of an opportunity to take a not unimportant position in the service of the Pennsylvania Railroad Company, being stationed at Duncansville, as general agent of the mountain or eastern division of the road.

On the completion of the western division, he was placed in charge of that section, and was soon afterward made the successor of General Herman J. Lombaert, who retired on account of ill-health, as general superintendent of the entire line. In 1859, on the death of the Hon. William B. Foster, the vice-president of the road, he was elected his successor, and retained that position up to the time of Mr. Thomson's death, being designated first vice-president after it became necessary to divide his duties.

At the outbreak of the late war Col. Scott became the assistant of Governor Curtin in equipping and forwarding troops to the field. He was shortly afterward called to Washington, and acted the part of assistant Secretary of War, having charge of the very important department of transportation and supplies, a position which he held until May, 1862, when his railroad duties summoned him back to Philadelphia.

Col. Scott's labors, however, have not been confined to the one company. He has been from its organization in March, 1871, the president of the Pennsylvania Company, the

agency through which the western roads leased by the Pennsylvania Railroad are operated; president of the Pan Handle route (Pittsburg, Cincinnati, and St. Louis Railroad) since March, 1871; president of the Union Pacific Railroad, from March, 1871, to March, 1872, when this road passed under the control of Mr. Vanderbilt; president of the Texas Pacific Railroad since its organization on April 15, 1871; president of the Atlantic and Pacific railroad (which is to follow the thirty-fifth parallel of latitude) since August 9, 1873; a controlling director of the Southern Railway Security Company, which has the management of a great network of roads in the South; and a director of the Kansas Pacific, Denver and Pacific, Denver and Rio Grande (narrow-gauge), and has a controlling interest in other roads. Recently the presidency of the Erie railway of New York was offered him, and declined.

On the death of Mr. Thomson, the esteemed and able president of the Pennsylvania Railroad Company, it seemed but natural that Mr. Scott should succeed him, which he has, by the unanimous suffrages of the Board of Directors.

COMPULSORY EDUCATION AND AMERICAN CITIZENSHIP.

TO the question, who are our best citizens? we reply, those who are intelligent, temperate, virtuous, industrious, and self-regulating. He is not a good citizen who is ignorant, dissipated, vicious, indolent, or criminal. Has the State a right to make education compulsory? Yes, when the character of citizenship depends so much on it. Society has a right to defend itself against criminals, pauperism, etc., and to legislate in the interests of all classes. She has a right to grant or to withhold licenses to sell alcoholic liquors as a beverage; to establish and regulate schools, reformatories, asylums, prisons, etc. Here are a few facts from a speech on Compulsory Education by Hon. Harris H. Beecher, of Chenango, N. Y., delivered in the Assembly, March 24th, 1874.

Upon the general question of compulsory education, a superintendent of schools, eminent as authority, concisely states the ground on which it rests as follows:

1st. Compulsory education protects the

nineteen out of twenty who are educating their children, against the one who, cruelly against his children and injuriously against the community, is counteracting what the other nineteen are doing.

2d. It involves the protection of innocence against wrong, for starving the mind is worse than inflicting injury on the body.

3d. If it is right to tax the property of all for the education of all, it is equally right to see that all are educated.

4th. If it is the right of every child to receive food for the body, he has a higher right to nourishment to mature his higher powers of manhood. Mr. Harris further remarked:

I am aware, Mr. Chairman, that it is charged upon the friends of compulsory education that they overestimate the extent of ignorance among the people.

In 1870, in this State of New York, there were 239,000 persons above the age of ten who could not read and write. There were 189,000 above the age of twenty-one who

could not read and write, of whom 73,000 were male citizens, and hence entitled to vote. The United States Commissioner of Education, in his report of 1872, informs us that over seventeen per cent. of the adult males of the country who are essentially all voters, are illiterate. Of the 7,500,000 voters in the United States, more than 1,000,000 can not read the ballot they cast.

[Fine material, this, for citizenship, is it not? Ought intelligent women to be denied a voice in municipal affairs while these ignorant men are to cast a ballot they can not read? Ought one to vote who can not read and write? Ought drunkards, criminals, and paupers to vote? Ought we not to put every child in the way of acquiring an education? We regard our country as the best in the world. It is Free—we wish to keep it so. Our only hope is in the intelligence and integrity of our people. All *must* be educated.]

LIBERTY AND ITS RELATIONS.

“THERE is no word in the human language,” says Mr. Froude, “which so charms the ear as Liberty. There is no word which so little pains have been taken to define, or which is used to express ideas more opposite. There is a liberty which is the liberty of a child or a savage, the liberty of animals, the vagrant liberty, which obeys no restraint, for it is conscious of no obligation. There is a liberty which arises from the subjugation of self and the control of circumstances, which consists in knowledge of what ought to be done, and a power to do it obtained by patient labor and discipline. The artisan or the artist learns in an apprenticeship under the guidance of others to conquer the difficulties of his profession. When the conquest is complete, he is free. He has liberty—he commands his tools, he commands his own faculties. He has become a master. It is with life as a whole, as with the occupations into which life is divided. Those only are free *men* who have had patience to learn the conditions of a useful and honorable existence, who have overcome their own ignorance and their own selfishness, who have become masters of themselves. The

first liberty is the liberty of anarchy, which to a *man* should be a supreme object of detestation. The second liberty is the liberty of law, which has made the name the symbol of honor, and has made the thing the supreme object of desire. But the enthusiasm for true liberty has in these modern times been transferred to its opposite. With a singular inversion of cause and effect, men have seen in liberty not the exercise and the reward of virtues which have been acquired under restraint, but some natural fountain, a draught from which is to operate as a spell for the regeneration of our nature. Freedom, as they picture it to themselves, is like air and light, a condition in which the seeds of excellence are alone able to germinate. Who is free? asked the ancient sage, and he answered his own question. The wise man who is master of himself. Who is free? asks the modern liberal politician, and he answers, The man who has a voice in making the laws which he is expected to obey. Does the freedom of a painter consist in his having himself consented to the laws of perspective, and light and shade? That nation is the most free where the laws, by whomsoever framed, correspond most nearly to the will of the Maker of the universe, by whom, and not by human suffrage, the code of rules is laid down for our obedience. That nation is most a slave which has ceased to believe that such divinely-appointed laws exist, and will only be bound by the acts which it places on its statute-book.”

AN AMERICAN COAL-CUTTER.

THE great waste incident to the old methods of mining coal has long been a sore subject for the consideration of economists, and many suggestions and devices have been advanced for its correction in part. A coal-cutter has, at length, been produced, and by an American. The *Gas Light Journal* says, with reference to it:

We give an account of the recent trial of the first practical coal-cutting machine in the United States. The machine is employed in the Coal Brook mines, about two and a half miles north-east of Brazil, Indiana, and is known as Brown's Monitor coal-cutter. The machine consists of a five-horse power steam-

engine, driven by steam carried into the mine by a steam-pipe, terminating, however, in a few feet of rubber hose, which permit of full freedom of motion to the machine. The intention of the proprietors is to employ compressed air in place of steam as soon as their experimental trips are finished. The cutting arrangement is an iron rim of four feet in diameter, which has on its periphery movable steel teeth, placed at points about twelve inches apart. These teeth may be taken out and ground whenever they become dull. This rim lies on small wheels which support it, and allow a free motion, and has cogs on its under surface which gear into cogs on a shaft turned by the engine. By this means the power is applied near the circumference of the wheel, instead of at the center, as in the ordinary circular saw. The principal reason for this arrangement is to get a deeper cut at the coal. The cutter can be put to a depth of three and one-third feet, or seven-eighths of its whole diameter, whereas the ordinary circular saw can scarcely cut to one-half its diameter. The machine runs on a movable track, and is fed by means of a screw working in cogs. The track is put down along the side of the coal at the proper distance from it, and when a cut has been made the whole length, the machine is put on tracks and wheeled to the next room, where the track is laid as before, and so on through the mine. The duty of the machine is put down at about a yard in five minutes. The estimate of its economy given by the proprietors is, that it saves about 35 cents per ton over the cost of putting out coal by hand labor, which, in a mine turning out say 200 tons a day, amounts to a saving of \$70 a day.

THE VALUE OF A COMMA.—In a recent debate in Congress, on the bill passed by a nearly unanimous vote of the House, to prevent the Secretary of the Treasury refunding duties, the case of the error in the Tariff about the duty on fruits was instanced.

The following is given as the correct history of the error mentioned:

When the Senate was debating the Tariff bill, on May 30th, 1872, Senator Morrill, of Vermont, stated, at the request of Senator Gilbert, of Florida, that he would ask to have the following amendment agreed to, and it was done unanimously, as follows:

Insert on page 25, section 5, after line 293, "fruit plants, tropical and semi-tropical, for the purpose of propagation and cultivation."

When the Senate engrossing clerk came to write out the amendment from the slip of paper sent up by Senator Morrill, the word "fruit" was above the line in which "ninety-three, plants," etc., were written; and evidently, from the inverted angle before the word "plant," was meant to be written before "plants, tropical," etc. So he put it, and put a comma after it, making it read, "fruits, plants tropical, semi-tropical," etc.

The House concurred in the amendment as it was written, with the comma in, and in that shape it went to the President, and put fruits on the free list, according to the construction of the Secretary. It is probably the largest small mistake which has ever occurred in legislation, being estimated to have deprived the revenue, up to this time, of about \$2,000,000.

THE NATION'S FORESTS.—To ascertain by scientific observations the influence of forests on the annual rain fall, moisture of the air and ground, and on the climate generally, the Bavarian government established in different parts of the kingdom seven stations, at each of which daily observations were made at two different points, one situated in the middle of a large open field, the other in the middle of a large forest. These observations, according to Dr. Ebermeyer's report, agree with the observations and opinions given by Humboldt, De Saussure, Herschel, and other scientists in regard to the great influence of forests on the climate, relative moisture, fertility, and healthiness of a country, and are confirmed, by the present physical condition of the Mediterranean shores, which, since the Alps, Apennines, and Pyrenees were deprived of their forests, have lost the verdure and fertility so glowingly described by ancient geographers and historians. Rivers famous in song and story have shrunk to insignificant streamlets, subject to sudden rises and overflows, inundating and covering with gravel and sand the former fertile valleys. The destruction of the forests of the Vosges and Cevennes sensibly deteriorated the famous fertility of Elsass and the rich valleys of the Rhône. The same discoveries, although in a lesser degree, we are now making in various parts of the United States. The wholesale stripping of our Republic's soil of its timber, continued at its present accelerated rates a quarter of a century longer, will be followed by a long era of physical degeneracy and climate deterioration that must sap its industrial and even its intellectual energies, and

reduce its fair and salubrious bosom to the aspect of a South American Llano. Unless there can be excited a national interest in this subject, and preventive measures are set on

foot, the vast interior of the United States must part with a great part of its magnificent agricultural, manufacturing, and commercial prosperity.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall !
Thou art the nurse of virtue.

A WORD ABOUT WOMAN-TALKERS.

SELF is the axis upon which a small mind usually turns. A more comprehensive one may seek many a mental nucleus around which clusters its wealth of thought, but the first is the all-sufficient center to which all rays of outer light converge, too often disappearing in shadow. That this mental condition is not a healthy one, is every day observable in our ordinary social intercourse. There is Mrs. A., who passes in her circle for a clever sort of person; "not without her peculiarities, of course," remarks a discreet neighbor. You drop in for a friendly chat, some pleasant afternoon, and the weather is no sooner discussed than you are elected for judge (passively speaking) without delay, and the lady in question proceeds to lay the case before you in all its tedious minutiae. The whole alphabet of personal troubles, mental, physical, and domestic, is dished out to you without reservation. What matters it that the world outside is radiant with sunshine—that the air is tempered with vernal softness, or that the blue depths bend tenderly over us, with a holy, unspoken benediction? A gloomy pageant troops by, and the sunbeams outside instinctively feel the chill of its presence, and shrink from entering. Of course some shadowy suspicions about liver complaint, etc., will come floating through your mind, but you try to be charitable, and slip an exclamation of sympathy in edgeways, but it only opens a new fountain of grievances, and the flow is augmented by your well-meaning venture. If, on the contrary, you attempt to act the part of defender for the fates, and essay to depreciate this mass of circumstantial evidence by a little flank movement of argu-

ment, the plaintiff assumes an injured air, and considers herself caught in the enemy's camp.

For a change, you step around to Mrs. B's. She is one of the most complaisant, pretty, well-dressed women in your circle of acquaintances, and you enter the new atmosphere with a feeling of relief. She meets you with an overpowering flutter of friendliness, and commences a conversation (?); but, alas! you are again in the presence of the great I. It is only a change of base, from Mrs. A. in the shadow to Mrs. A. in sunlight—only a new phase of the same character. While Mrs. A. wears green spectacles, Mrs. B. wears rose-tinted ones; but both pair are devoted to the same use. Then follow a recital of innumerable chapters concerning *my* house, *my* husband, and *my* children, *my* influence in society, *my* benevolent operations, and *my* private virtue; all sweetly perfumed with the delightful incense of public approbation. To the latter, you are, of course, expected to add, and the fact is made known to you by a skillful little system of polite fishing—the hook well concealed by flattery, for your ostensible benefit.

Your next call is at the house of a species of model housekeeper. You soon find that she sits in judgment on her professional sisters every day in the week, and wears the sentence written in every line of her face, as inflexible as fate and as uncompromising as death. She puts you through a sort of culinary catechism, in an indirect way, wearing the while an expression of stern pity for your possible delinquencies. She comes down with an avalanche of recipes, dwelling, with special emphasis, upon *my* achieve-

ments with the same, and ends with a protracted self-glorification upon household affairs in general. I mean no disparagement to thrifty housewifery, and the results of labor are enjoyable; but if one is compelled to thread a labyrinth of bristling machinery while inspecting the triumphs of any art, pleasure vanishes in a mist of laborious calculations, and the intended effect is lost.

Mrs. C. is next on the list; but, alas! she is possessed of a chronic affection for by-gone days, and inflicts upon you such copious reminiscences of the same, into which every last one of her mouldering relations are tumultuously dragged and held up for your sympathetic inspection, that you escape in despair, feeling as if you had visited a country churchyard on a rainy autumn day. But as I do not wish to be considered a constitutional grumbler, by way of reparation I will present Mrs. W., one of your whole-souled patterns of nature's nobility, instinct with charity, great-hearted in every sense, and whose very faults are a tie, being a demonstration of kinship to the weakest. Her conversation—can we analyze a noble landscape and discover wherein lies the secret of its highest charm? Is it in sunbright stretches of water? in mossy depths of cool shadow? in the undulating swells and graceful curves

of the hills? or in breezy, changeful masses of foliage? Not even all these hold the subtle fascination. Does not culture overpass all circumscribed limits, and, stretching forth its arms to the infinite, sigh for new worlds to conquer? And yet men and women survey their little province of thought and aim, and, wrapping themselves in the mantle of self, exclaim, it is enough; we are content.

We stand beside the ocean of time. Not a wave breaks at our feet but leaves some trophy of progress behind at its ebb. Not a wind sweeps shoreward across the waters but bears some whisper of human conflict and anguish, of human victory or defeat. Not a bar of sunlight strikes athwart the cloudy spaces overhead but reveals some new tint and shape of loveliness. Yet we can stand, with averted senses, beside these heights and depths of God and nature, unchanged and unshaken, self-immured behind the rusty bars of self, narrowing, narrowing every day. Can we wonder when God reaches down sometimes and troubles the calm of this death in life and wrings our hearts till the scales fall from our eyes—until at last the latter are lifted to the unveiled reality, but with a new inspiration of earnestness flashing through the blessed baptism of tears?

EDITH LYSLE.

THE SCHOOL-GIRL OF THE PERIOD.

ONE evening lately I put Mrs. S— in my debt by one of those desultory calls, which, as near and dear neighbors, we are accustomed to pay each other, with only a shred of crocheted Berlin over our matronly locks. The family was assembled in the sitting-room. Nellie, the youngest daughter, in the second year of her normal course, was wrestling with to-morrow's lessons, her eyes brilliant, her cheeks flushed as with some keen excitement.

"My dear child, you look like a fever patient," I said in commiseration not wholly pretended.

"Going to a concert at eight," replied the student in ellipsis, laughing in ellipsis likewise, "so I have to gain the time." She struck the spurs into her jaded steed, and was over the hills in the study race.

Across the table from Nellie, by the light of the same lamp, sat her brother Will, hunting through the evening paper, and now and then, whenever he brought down any game worth the while, regaling the ears of the circle with the same. Rather frequently such item provoked laughter and discussion, no one dreaming, by the manner in which it was indulged, that they were levying still heavier tax on the girl's powers of appliteration.

By and by, her mother having left the room for a brief space, Nellie suddenly closed the book on her finger to keep the place, and slipped over to the sofa and me, revealing in the act that she had more burdens on her mind that yet appeared. She began by informing me that she had attended the theater the evening before; that the performance was "perfectly splendid," and that

Mollie and Sue Griggs, and Lou Mason and—I have forgotten who besides of her party—were going again to-night. But, she added, a sigh fluttering on her lips, then suddenly bracing her side with her hand, *her* mother was so different from other mothers as seldom to approve of her attending those places. To which I replied that my judgment was with her mother's, and there would be time for society when school-days were past. With a swaying of her head, like a boat in danger of being swamped, Nellie muttered that one couldn't keep at books forever. And still I perceived that this was not precisely what had brought the child to my side. After opening and shutting her book repeatedly, while pushing the carpet as if that little right foot of her's were a patent stretcher, Nellie ventured thus:

"I presume you know about Miss Attleboro's party, last Wednesday evening? I didn't attend;" the last clause in most abject tone. "There's just no end of the girls' telling what a magnificent time they had. A supper at half-past ten, and the dancing kept up till two. Now, I want to tell you"—in a very impressive whisper, and not without fidgeting and hesitation—"that Rilla Dow, next Wednesday evening, Rilla's birthday, you know—"

At this momentous epoch our conversation was interrupted by the entrance of Nellie's mother, and Nellie, with her book open before her, glided back to the center-table. Shortly after, the friends who were to take her to the concert rang, and with a hasty good-evening my little neighbor departed.

Next morning, as I sat down with my sewing at the window, a familiar voice called, "Look up, please." I looked, and then threw up the sash to Nellie, who, resting her strap of books on the iron pickets, leaned over them to finish her incomplete sentence of the evening before.

"It is *such* a favor I have to ask. I'll be grateful to you as long as I live if you will speak to mamma in favor of my going to Rilla Dow's party next week. Will you?—oh, please!"

"I am inclined to think, Nellie, that I would rather you should be less grateful and live longer," I said, leaving her to infer my meaning; "however, I will consider the mat-

ter, dear, and in case I would be willing you should go if you were *my* daughter, I will use my influence in that direction with your mother. You can drop in to-night and learn the result."

The girl winced and bit her lip anxiously. Knowing it was late she could not pursue the subject, so with a pleading look and a nod of good-morning, she hurried on to school. I watched her to the head of the street, where she took a car, though the distance could easily be walked inside a quarter of an hour; but first she had not so much time, and secondly she must improve the minutes in reviewing her lessons. Further still, Nellie does not enjoy walking—you could see at a glance why. Her dress is both too close and too long to allow her any freedom of lungs and limbs. Earlier in the winter she took a heavy cold from damp feet, her boots being no sufficient protection against either wet or cold; and as for wearing rubbers, she feels outraged by the bare mention of anything that would make her feet look *so big*. She is in love with her English walking-jacket; it is a pity she can not appreciate the style of boot that completes the costume of our transatlantic cousins.

Upon Nellie's calling in the evening as requested, I read to her this slender, though in her ear portentous sketch. It pleased her infinitely less than the verses "On a Love-letter," which she begged leave to clip from a newspaper borrowed of me a short time ago. In fact, had I produced it from motives of vanity, my Approbativeness would have perished of hunger. On the young brow, when I had finished, hung a shadow dark enough for the pall over her dead hopes of attending Miss Dow's party.

"My dear," I asked, mindful of her need of support in so heavy a trial, "have you dined?"

"Thank you, yes—no," languidly; "that is, I took dessert—a piece of pie—nothing more. I'd no appetite for anything else; and I ate a slice of cake on first coming home, for I was feeling too tired and faint to wait for dinner?"

"You began the day with a good breakfast, I presume?"

"I breakfasted on a cup of coffee alone; usually I eat a hot biscuit with it, but this

morning I slept late and the biscuits were too cold for my liking."

"And at recess?"

"At recess? Do you mean to ask if I lunched at recess? Why, no; we crunched a little confectionery—we commonly have some of that among us to pass around, you know. Oh, but we had a sensation to-day, to be sure we had! Minnie Monroe is out with an engagement ring, do you think! She calls it a diamond; Mollie Griggs whispered me that there are various qualities of diamonds in these days. Her beau is a youth of twenty-nine, and Minnie was sixteen at Christmas—one month younger than I. She says she may leave school at any time to be married. Don't you think that a very foolish thing for a girl to do?"

"Indeed, I incline to that opinion. But have you and the girls of your set no fear of injuring yourselves by study, and graduating, if at all, with ruined health—perhaps paying for your education in invalidism for the rest of your lives? A dreadful possibility, if you will consider. To be plain, though I do not wish to alarm you, you are not looking as healthy as you looked a year ago. Honestly, Nellie, don't you feel a good deal fagged with school already?"

"Fagged is no word for it!" exclaimed the student, flinging herself on my proffered sympathy. "Half of us are just dead—or sure we shall be by this time next year. Such lessons!—teachers haven't any mercy—no one has any mercy on us. As Will says, we must either do or die."

"Your brother seems to be getting on in his books easily as rapidly. What do you suppose would be the effect, were you girls to adopt some such clothing as boys wear? I do not mean coats and trousers, but a style of suit as easy and commodious—and were you to take your recreation in out-of-door exercise, corresponding to rowing and playing ball? These amusements, by the way, do not commonly extend far into the night, encroaching on the best hours for sleep, which gives them another advantage over concerts, parties, and theaters. Such a revolution in your habits of living would give you boys' appetites for something from which your systems may manufacture more and better blood than can be manufactured from

pies and cakes, candy, hot, fine-flour bread, tea, and coffee. In my most candid opinion, Nellie, it is only a question of time when the majority of you girls will severally find yourselves under a doctor's care for everything that doctors can not cure; and your usefulness to the world will be limited to the examples you will furnish certain medical writers, of the awful consequences of female education. There now, dear, it is a quarter to nine; run home and be in bed when the clock strikes; shut down on all longing after this party, and be a sensible girl generally, for the sake of a future sound mind in a sound body."

My young lady, who during the whole paragraph had stared in blank amazement, dropped her eyes, rose, and obeyed me, so far as concerned going home; but the delightful enthusiasm which would have rewarded my promise of intercession in favor of the party, I was obliged to forego.

MRS. L. S. GOODWIN.

DRESS PLAINLY.—Some one has given the following reasons why people should dress plainly on Sunday. These reasons are as valid any other day in the week: It would lessen the burden of many who now find it hard to maintain their place in society. It would lessen the force of temptations which often lead men to barter honesty and honor for display. If there was less strife in dress at church, people in moderate circumstances would be more inclined to attend. Universal moderation in dress at church would improve the worship by the removal of many wandering thoughts. It would enable all classes of people to attend church in unfavorable weather. It would lessen, on the part of the rich, the temptation to vanity. It would lessen, on the part of the poor, the temptation to be envious and malicious. It would save valuable time on the Sabbath. It would relieve our means from a serious pressure, and thus enable us to do more for good enterprises.—*Mothers' Magazine*.

[Very good; now for the other side. When remonstrated with for extravagance in dressing for church, a lady replied, Can we dress too well for the house of God? Are we not in duty bound to bring our richest attire to Him whom we worship? Do not godly

men rear the grandest temples in His honor? Do we not owe *all* to Him? Thus it will be seen that there may be two sides to every question. We believe those who dress most

healthfully and most becomingly will be most acceptable to Him who requires us to observe his physical, no less than his mental and spiritual laws. Let us dress suitably.]

WHERE IS HOME?

BY MARY E. GILMER.

WHERE is home? you ask, and I
Answer, where my dead ones lie;
Where I vowed, with bated breath,
At the altar, "True till death."
There is home!

Where the cedars crown the hills,
And the limped, rippling rills
Murmur as they ripple on,
Of the days forever gone;
There is home!

Where magnolia odors float,
And the song-bird's wooing note,

Borne upon the evening breeze,
Lingers in the dooryard trees;
There is home!

Where, unknown, unthought as well,
Years ago I said farewell
To that precious one who sleeps
Where the weeping willow weeps;
There is home!

Stay! no home have we, ah, no!
"Life is all a fleeting show;"
But beyond that mystic sea,
Where the many mansions be,
There is home!

IN THE TOILS OF FASHION.

A LETTER TO A LADY WHO FEELS OBLIGED TO CONFORM TO THE REQUIREMENTS OF CUSTOM.

MY DEAR MADAM—Your case enlists my deepest sympathy, and all my faculties, under the active, urgent spur of Benevolence, resolve themselves into a committee of the whole on ways and means to mitigate your ill-concealed sufferings.

If your slavery were compulsory, there would be combined with your sense of wrong, injustice, and degradation a fiery hatred of your bonds, and a burning aspiration for freedom, which would go a long way toward realizing that coveted condition, but, like all voluntary servitude, yours is a state in which no bondage is openly confessed, in which all pains are regarded as pleasures, all evils patiently and uncomplainingly endured, and, so far as may be, covered, though your whole life, in its poverty, barrenness, and blighted powers attests mournfully to your reckless violation of its laws of liberty and rational development.

The heathen woman who flings her babe to the God of the Ganges, and to whom, with loud ado of pity and piety you send a proselyting missionary, stands in no more need of regeneration than you who also sacrifice your babes to gods as unrighteous, and with

greater sin, because, born and nurtured under the superior influences of a higher civilization, the exercise of a free and enlightened reason is demanded of you.

You say that in order to maintain your standing in society you have, against your better judgment, to make certain concessions to its claims, and to yield an obedience to its laws, a deference to its forms and opinions which puts you often, as viewed from the stand-point of reason and common sense, in a most absurd and ridiculous position.

Will you suffer me to ask, in the interests of those whose desires are toward a higher life, but whose feet are snared in the ruts and tangled in the webs of false customs, do you gain anything by this sacrifice of your own convictions of a right and rational course to pursue which compensates you in the smallest degree for the loss of your self-respect and personal independence? And need your social standing, indeed, be in any wise affected by honest, consistent, straightforward action, even though it conflicts with the petty conventionalities that are binding only on the weak, weather-vane time-servers who have clipped their individuality to the

iron rule of Proustes? How, my dear lady, does society reward you for all the toils, and pains, and crucifixions that you undergo in the trembling expectation of its fickle favor? When you have put forth all your mental powers, and strained every nerve in your effort to meet its requirements, and to come up to the bare level of its arbitrary standards, do you feel, in the superficial recognition which you get for your trouble, any earnest of loyalty and devotion in your hour of misfortune, any assurance of permanency, and rest, and support which satisfies in any sense the natural cravings of your heart for friendly ties—for fraternal affection and approbation? Do you not have, even in the supreme moment when you skim the topmost wave of its favor, a vague, uneasy, unhappy consciousness that if you failed, for any reason, and at any time, to present the flimsy, sham credentials of social respectability, so recognized, you would be cast into outer darkness, and thrust down to the bottomless pit with sneers, and execrations, and maledictions, and damnations dropping like fire-balls on your unlucky head?

Now, the sincere, honest, self-respecting soul that, resolute and undaunted, pursues unfalteringly the way which reason, with unerring wisdom, points, having no fear or dread of men—and particularly of women—to distract, confuse, and darken the understanding, lives above those petty strifes that eat like canker into your golden days, and, withal, commands a reverence and compels an admiration even from the dazed devotees of sham which you, with all your toil and struggle to *appear* rather than *to be*, fail somehow to inspire. For the fact is, my friend, we can not sacrifice the higher good to the lower—the spiritual to the merely base and temporal, without the chance of missing both, and of realizing a literal fulfillment of the law which reads somewhat sternly, “From him that hath not shall be taken away even that which he hath.” When you have cast all in the balance to win the smiles of Mrs. Grundy to-day, you must not complain that if to-morrow she turns her back on you for your failure to meet some other requirement, and bestows the light of her countenance on one who doesn’t care two straws whether she beams or frowns. Even

this capricious mistress on whom you obsequiously wait, pays an involuntary respect to those who respect themselves too much to be carried about by her vagaries, and makes you feel, when you have done all that you could to satisfy her whims, that you are altogether an unprofitable servant, getting not even a reward of thanks for your pains.

In truth, my dear madam, the chains you wear are of your own forging, and the tyrannic ruler under whose whip and spur you walk is purely a delusion of your own creating. Resolve that you will follow simply your own instincts of right, and the power to which you now bow with such tameness and submission will become as unreal and mythical as the gods of the ancient Greeks. Why, indeed, should you, a free, moral, and rational being, renounce your own liberty of thought and action, and sacrifice the highest gifts and largest opportunities of life to the absurd dictates of fashion, which is something or nothing, as your fancy shapes?

Would any one be defrauded, or the kingdom of Heaven stayed in its progress, if you should defy the law which prescribes the cut of your gown, the order of your table, the adornment of your house, and dare independently to govern each as your honest judgment and individual needs direct? Would it be a matter of vital and eternal moment if you should wear a flounce less than your rival, Mrs. So and So, or in your household expenditures show a trifle less ostentation and display? Considered in the broader sense, most certainly it would, for the difference in money, labor, time, and health would give you generous opportunity for the cultivation of higher ambitions and the pursuit of nobler ends; and while no one on earth could be profited by your strained effort at conformity with your neighbor’s externals, the whole circle of your friends and acquaintances, and, indirectly, the whole brotherhood of humanity, would be strengthened, uplifted, and inspired by your enlarged views and your quickened graces and harmonies of character. Shall life, with its infinite possibilities, its million avenues of usefulness, its divine reach of powers and sweep of opportunities, be narrowed down to the petty strife and poor ambition to outrun and outreach your fellows in the race for mere fictitious honors

and distinctions—glittering, empty baubles, that break in your hand and leave you staring with a fool's face into the vacant air? Will you waste the substance of your days in feverish strivings for unsatisfying husks,

when you might be gathering heavenly manna in the Master's work-fields that are white already to the harvest, and rustling to the thrust of the earnest laborer's sickle?

A. L. M.

HOME DEPARTMENT.

RUINED BY GOOD-LUCK.

BY MRS. JULIA A. CARNEY.

"**T**RUTH is stranger than fiction," is an adage so often repeated as to have become trite. I was reminded of it, during the past year, by reading a story in the *JOURNAL* with the title, "Philip's Lottery Ticket," which, from internal evidence, I presume to be fact. It carried me back, however, in memory, to the very mature age of sixteen, when I thought Alonzo C—the prettiest specimen of young-manliness I had ever seen. Very singular did it seem to me that my mother did not coincide with me in this belief; still more singular that, although his mother was one of the still-loved friends of her girlhood, she steadily discountenanced any acquaintance between her daughter and the son of her dear friend.

He was rather above the common stature, but so finely proportioned as to seem "just right," with curling brown hair, of a chestnut shade, and the whitest teeth—a girl might have envied both teeth and curls in another girl; as they belonged to a young man, what could she do but admire them?

Pray, do not think I lost my heart then and there. Looking back through all these intervening years, I do not think there was the least reason for maternal anxiety, since even then, as cordially as now, were merely "pretty" men held in contempt in my estimation. My rather freely-expressed admiration ought to have quieted her fears, for a woman will no more praise the man she loves than a bird will flutter toward its nest when the intruder is near.

So remember, young man, if the girl you fancy tells another young man she is glad to see him, chats gaily with him upon all the topics of the times, and, when he leaves, asks him to call again, you need not be the

least bit jealous. She cares not the flirt of her fan for him, or she would have done none of these things.

Yet Alonzo C— had other qualities besides a clear complexion, deep hazel eyes, and a winning smile. He was intellectual and well educated, planned, one would have said, for a true and noble manhood.

I will give you a brief sketch of his life, partly from the "few words of caution" my mother "felt it to be her duty" to bestow upon me, and partly from my own subsequent observation.

He was head clerk to T—, then one of the most enterprising book-publishers at the "Hub," with a good prospect of a partnership. His employer had himself suggested the probability of such an arrangement at no distant day, and most people supposed, from certain unmistakable signs, that another kind of partnership would soon be instituted between him and his employer's fair daughter.

At that time lotteries were licensed by law, as drinking saloons are now—may the day soon come when the last part may seem as strange as the first. Whether it was undue haste to be rich, or over-persuasion upon the part of some ticket venders, or mere thoughtlessness that induced him to buy a ticket, I know not. That act was the turning-point of his life. He had the ill-luck to draw the highest prize offered, twenty thousand dollars. He did not think it ill-luck at the time, however. He was nearly wild with joy, so was his poor widowed mother, so were his two young sisters; almost envious were his younger brothers, who immediately commenced teasing for a portion of it to buy lottery tickets with, that they, too, might become rich. More fortu-

nate than he, they drew blanks every time, and, at last, disgusted with their "luck," went back to their work, became rich by honest trade, and so were able, years afterward, to pay the expenses of his last sickness, and give him decent burial.

Could that poor mother have been told, as, with brain almost bewildered with joy, she tried to realize the magnitude of the sum, and plan the wonderful things that they would do with it, that it was the price of her boy—how would she have shuddered—how earnestly would she have tried to cast it far from her! Alas! how vainly she cried, in after days, come back to me, poverty and toil, if with you ye can bring my son, pure and true as when he shared with me your privations!

How bitterly and passionately sobbed forth to my sympathizing ear his young sister, "Oh! would I had never had a brother, or he had died in his innocent childhood!" For even as she spoke, tramp, tramp, up the stairway, through the hall, past our chamber door, stopping only when it reached his room, came the heavy tread of the night police, bearing their worse than lifeless burden. It was an arrangement made with the city watch, by one of the lucky brothers who only drew blanks, and so were left to become rich and respectable by honest industry, that, whenever the unlucky drawer of the \$20,000 prize was seen reeling through the streets, or lying in the gutter, he should be taken care of by these faithful guardians of a slumbering city, and conveyed or assisted to the shelter of his own room, under his mother's roof. Surely my friend forgot her kind and manly brothers, who were the pride of her heart and the solace of their mother's affliction, in her passionate grief for his sin and shame.

The day he drew the prize, he bade his employer farewell! The money he received in payment of his salary due that day was the last he ever received honestly. For anything gained by any form of gambling is not gained honestly, whether it be the quilt or the dressing-gown at a church fair, the ring from the festival cake, or the prize in an old-fashioned lottery.

That day he bade adieu to toil of hand or head; he also bade adieu, although un-

consciously, to health, happiness, respectability, and to wealth. He thought his "luck" had made his fortune. His use of it closed the door of fortune, and barred it forever.

He purchased lottery tickets by the wholesale, but except a few small prizes, his "luck" seemed to have deserted him. Upon the whole, he did not get his money back again. Then he resorted to other modes of gambling, sometimes losing, sometimes winning, as more experienced gamblers saw fit to allow him to do, that they might lead him on to higher stakes, which were invariably lost. They persuaded him to drink that he might play more recklessly, and when he lost, as he usually did in the end, he drank more freely in his desperation to drown disappointment and forget his losses.

Of course he soon acquired an appetite for liquor, which quite reversed this programme; for having now little money to lose, he played in hopes to win enough to purchase the means of gratifying his appetite. Losing still more frequently, as he was oftener under the influence of alcoholic stupefaction, he at last pawned his watch, the costly rings with which he had delighted to ornament his lady-like hands, and even his clothing, to pay his gambling debts and procure liquor. Why follow the fortunes of a now habitual drunkard? We all know the steep descent down which so many sons, brothers, husbands, fathers, have fallen; clinging with frantic despair to the rocks along the pathway, yet only to stay their fall for a moment, and then, with torn and bleeding hands uplifted wildly toward the weeping wife, the frantic mother, the tattered children dragged half way down with them, and now watching, trembling, agonized, the last scene, which shall end alike their slavery and his sufferings. His own slavery, I should have said, for the dominion of sin is worse than that of sorrow.

Blessed, indeed, was it that he had neither wife nor child to weep his shame. Never shall I forget the joy with which one of my young friends mentioned to me his having enlisted in the Mexican war.

"It may be the means of his reform," said she, "and at least it will be a relief to his poor mother and sisters."

"I think you mistake," I replied, with some bitterness; "he will return, undoubtedly, and worse, if possible, than now."

"What can be your reason for thinking so?" asked she, adding, "All their friends are hoping for the best."

"I always like to hope for the best," I replied, "but in this case, I fear the worst. He is not the kind of man that is killed in the front of the battle, and only a noble cause earnestly espoused can render the life of a soldier ennobling. He has enlisted in sheer desperation, perhaps in a drunken frolic. He will shirk or drag through, if he does not actually desert and come home the first opportunity, with all the vices of the camp."

"I am afraid he has most of them already," said she, and we turned to other subjects of conversation.

The event justified my prediction, and the tidings of his death, many years afterward, come with the words, "He never seemed even to try to reform after he left the army, and at last, after being so long a sorrow to

his mother, and a disgrace to his estimable sisters and brothers, he has died a drunkard's death."

Let us turn to a pleasanter picture, before I close this *true story*.

The young man who was next to him in Mr. T's store, although not supposed to be nearly as "smart," was promoted, upon his sudden resignation, to his place. This was done almost from necessity, as no one else so well understood the business. He proved, however, far more capable than his "smart" and "lucky" predecessor. Beneath a very quiet exterior, was hidden a depth of real talent. He soon became junior partner, and ere long the gossiping world were astonished to learn that the employer's daughter had given to him, and not to Alonzo, her heart and hand. Not long afterward, his father-in-law having retired, he took sole charge of the business, and lives to-day, a man of wealth and worth. Should I write his name, not one who reads this page, but would at once recognize it, as that of a man well known to fame. Surely, work is better than luck.

PHRENOLOGY IN THE FAMILY.

[The following letter, written by a gentleman living about twenty miles from New York, to his brother, on the subject of family training, and the aid he has received from Phrenology, was handed to us with permission to publish without the names of the parties.—ED. PHREN. JOUR.]

DEAR BROTHER—I have often thought it my duty to recommend you to avail yourself of the advantages of Phrenology, as I have done, by taking your children at once to a competent phrenologist, and have his judgment to direct you in your future course with them; not only in governing them, but in selecting trades and professions for them to pursue for a living, etc. We have derived great benefits in having taken our children, while yet quite young, to good examiners, and receiving their timely advice in regard to managing them, and selecting a course for them in their future calling. I was led to do so more particularly in regard to J—, who, you know, was a very stubborn boy (his grandmother must have informed you how we had to punish him to

make him obey), and we were at our wits' ends to know what to do with him, when it occurred to me that I would take him to New York, with the other children, and test the truth of Phrenology. Having done so with J—, and finding that so much was told about his habits and leading traits, as if the phrenologist had always known him, I was compelled at once to believe them capable and trustworthy. The examiner told me that I should not punish him; that I could govern him much easier by good advice, and by selecting his company for playmates. I did so, as I was opposed to using the rod, and by reasoning with him I found that our home became happier, and we were saved from a great many disagreeable conflicts.

We were advised that he was possessed of a large amount of social qualities, and would be easily led astray, and given particular charges about selecting his associates, which I have done as far as a parent could well do.

He, as you well know, is now over twenty-one, and has a trade, but has a natural taste for portrait-painting, and has produced as fine work in that art without any instruction as has ever been done by any one with such practice as he has had. He has professed religion this winter, and joined the church. He has been a remarkably good boy ever since our change in correcting him. Of course, at first it was more difficult, but when he found that we loved him, and did not want to punish for the sake of punishing, he grew more tender-hearted and susceptible of reasoning when detected in wrong acts. Oh, how much pain and anxiety would parents save themselves if they knew how to manage their children! The cruel treatment visited upon poor, helpless little innocents helps to harden them in their disobedience, and their homes are made more and more unhappy and distasteful; so often such children become dishonest, and bring down the gray hairs of their parents to the grave, while the sin lies at the door of the parents, because ignorant of the manner in which they

should govern and guide their youthful steps. But they might have avoided such unhappiness if they had received the important truths that are taught by Phrenology in regard to the best way to govern and direct their children in their homes. The want of this unappreciated knowledge by so many thousands makes many a home a pandemonium on earth, for where children are punished for every little offense, home is not home to them.

And now, dear brother, as you sometimes punish without the best discretion, and your children are just growing to an age when you should exercise your best judgment in managing and selecting a calling for their future life, go at once to Messrs. ———, or some other phrenologist in good standing, and obtain advice. It will be worth a thousand times more than it costs; in fact, it will be impossible to estimate the benefit which will result from a proper step in this direction, as their lives may be made happy by judicious directions given in youth. *Go at once—don't delay.*

Your affectionate brother, J. S.

THE SUNNY SIDE.

THERE is always a sunny side to look at. All of us can turn away from the dark and gloomy passages which we meet on our way, and walk in God's sunshine. The brightest natures live longest, live most, and live truest; their lives round into fuller perfection and development than their less fortunate brothers and sisters who look on matters in a shady light. Ah! life is beautiful, with its varied phases and constantly shifting scenes—a panorama that never is monotonous or tiresome if rightly viewed. Though the road be sometimes rough, polish comes by rough treatment. The diamond would be useless unsmoothed and unpolished.

Our natures require obstacles to give us tone and strength. Combativeness is a blessing when rightly exercised. A want of it causes many fits of "blues" and many defeats in life. We all have a right of independence, and should maintain that right—not to the detriment of others, but for our own selfhood.

The sunny side is often obliterated for

awhile by our contact with rough, unfeeling natures, those inharmonious beings who roam through this world and seem to have no mission but that of making themselves comfortable at the expense of everybody else. But let not your ideal of humanity be disfigured by these; remember that the rough and ragged burr covers the sweetest of nuts, and the "germ of divinity" exists in all, however thick the vail which conceals it. There is a key-note to every soul, and if we could find it the judgment passed upon others would be less harsh. Perhaps their lives began amid stony ground, and their early days were only sad remembrances. But they have a sunny side hidden away somewhere in the tangled mesh—it lies waiting to be discovered.

And now I will only say, Let no one come between you and your happiness. Keep your eyes fixed steadily on the ideal you have formed, and with justice, charity, and self-reliance for your guides, choose the sunny path of life, and fulfill the destiny waiting for you.

AGNES.

EFFECTS OF WEATHER ON PIETY.

“**H**ERE are some suggestive thoughts which we advise all to read and ponder: ‘There is a mystery about this effect of the weather on piety. Sabbath heat seems hotter, Sabbath cold colder, and rain wetter than that of any other day. For the same measure of heat or cold or rain on a week day will not keep a man from his usual business. We need a Sabbath almanac, calculated for churches, that will show by its weather scale when it will be safe for a vigorous Christian to expose himself on the Sabbath by going to the house of God. Such an almanac would enable pastors and superintendents of Sabbath-schools to know whom they could depend on in church, Sabbath-school, and prayer-meeting. I have recently been examining microscopic views of snow-flakes, a hundred or so of them. I would suggest to our curious savans an examination of Sabbath snow, to see if it has a peculiarly sharp and injurious crystal.’”—*Religious Herald*.

[Yes, there are many “fair-weather Christians,” no doubt. But why? What do folks go to church for, if not to show their new clothes? and wet rain, “you know,” would take the starch and the shine all out of these, and *that* would be *bad*. But what *is* the object of going to church? “Oh,” says one, “for the example of the thing.” Another says, “I go from a sense of *duty*.” Another excuses himself for not going on the ground that the room is too close, badly ventilated, and it gives him or her a headache. Another can not afford to dress quite as well as Miss McFlimsey; and another can not pay for a pew in a fashionable church, and she don’t like those mission churches, where only poor folks go.

Now, “where there’s a will there’s a way,” and we beg to inquire whether hungry sheep have to be coaxed to eat? or, when there is a prospect of being fed, whether they will not be promptly on hand where the food ought to be? Is the fault with the people, or is it with the preacher? Has the preacher anything but dry doctrinal husks with which to feed those who seek? Or, is he so feeble, dyspeptic, jaundiced, narrow-minded, or bigoted that no one wants to hear him? Does he usually select his text from Lamentations, and so preach a “scarey,” hopeless, depressing sermon, which drives weak and timid mortals to despair and to insanity? A sick preacher will preach a sick sermon, and make all his hearers sick—sick of him, sick of the church, if not sick of that sort of piety.

In London some three thousand or more people crowd into Mr. Spurgeon’s Tabernacle, and *think* they “get their money’s worth.” It is the same in Mr. Beecher’s church in Brooklyn. Who ever heard either of these preachers blame his congregation for not going to church on account of the weather? They never tease, coax, or threaten. It is quite a different sort of preachers who find fault with the people and complain of desertion.

Show a dish of salt or a few nubbins of corn to a flock of sheep and they will all promptly follow. Even a stupid donkey knows better than to be beguiled into running after dry, doctrinal straw, no matter how loud or how long the bell rings. Something to eat that will *nourish* is the thing wanted; something fresh, crisp, and succulent. Exhibit this, and your house will be full, be the day hot or cold, wet or dry.]

THE VENUS FLY-TRAP.

THE number of strange and wonderful plants which have been classified and described by botanists is very considerable. Among them are species possessing properties so peculiar that the observer at first sight is inclined to accord them a degree of intelligence at least of the higher brute type, if not of the human.

The family of the sensitive plants, for instance, is large, and affords a field for most interesting study. The reader is familiar, doubtless, with one or two of the common species of the mimosa. In our illustration we have a plant of peculiar action when touched by foreign substances. In fact, so sensitive are its leaves that the touch of an insect even produces rapid motion. This plant is known to naturalists as the *dionaea muscipula*, or, as it is sometimes called, Venus’ Fly-trap. It grows in marshy places, in the Southern part of the United States, and is a perennial, with a rosette of root-leaves, from the midst of which rises a stem about six inches high, terminating in a corymbic cluster of white flowers.

The peculiarity which we have chiefly to speak of resides in its leaves, which are terminated by two concave plates or valves, set round at the margin with long, bristly hairs, and having on their surface small glands which distill a mucilaginous fluid, attractive to insects.

If a fly venture to rest upon the inner surface of this trap, the plates suddenly snap to-

gether like the covers of a book closed quickly. If the insect struggles, the parts adhere more closely, holding him a prisoner until he dies, or until, tired out, he remains motionless. Then the plates slowly open, ready to close again, however, on the least movement of the fly. If

and is well satisfied that its movements are due almost entirely to electrical conditions. By connecting sometimes the limb and sometimes the petiole of a living leaf with the circuit of a galvanometer, two permanent currents were discovered, acting in contrary directions, one pass-



THE VENUS FLY-TRAP.

this does not take place, the trap allows its victim to fall out and remains set for new prey.

A writer in *La Nature* says that Professor Sanderson, of the Royal Society, has recently made some examination of this singular plant,

ing through the limb from base to apex, and the other directed from the base of the limb to the base of the petiole. The experiments of Professor Sanderson throw considerable light on other phenomena heretofore obscure. The peculiar movements of vegetables, it may be con

sidered as established, result from changes in tension produced in the tissues, either spontaneously or accidentally. The tensions are due to the unequal turgescence of the cellules, the surfaces of which either absorb the water which surrounds them, or else abandon it, by virtue of a special property of their substance

under the influence of physical forces, such as light, heat, and, without doubt, electricity. The most recent researches, for example, show that the drooping and the erection of the leaves of the sensitive plant result from a displacement of the water which swells alternately the superior and inferior vessels of the base of the petioles.

Department of Physiology—Our Sanitarium.

Cultivate the physical man exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity—it may be a monster. It is only by training all together—the physical, intellectual, and spiritual—that the complete man can be formed.

CURIOUS FACTS ABOUT A CURIOUS BODY.

THERE is a man living in New Hampshire who, in his earliest childhood, exhibited signs of idiocy, attended by other signs of deficiency. He could neither speak nor walk. When about ten years of age he began to walk upon his toes, as he does to this day. While attempting this awkward peregrination he met with a fall, and exclaimed, "Bump!" the first word he ever spoke. When twelve years of age, or thereabouts, he sustained another fall of a similar kind, and again ejaculated, "Bump!" and from that time he talked freely. To-day he is a free-talking, intelligent man.

Suddenly developed extraordinary effects are quite common in the experience of our physical humanity. Down in New Orleans this year a young child apparently died. The funeral arrangements were made, the solemn ceremonial performed, and the hearse brought up to the door. Just then a loud peal of thunder broke from the sky, and the little one roused in fright from what might have been its painful death fate.

So a young lady in New York city suddenly lost her speech from no immediately apparent cause. Five months of deprivation and affliction passed away, and then her voice came back to her. But the recovery was as sudden and extraordinary as the attack. A kerosene lamp exploded. She became alarmed, and probably shouted or screamed. The paroxysm over, the gratification resulting from the full restoration of her vocal powers ensued.

The study of any natural science tends to

interpretations of effects by ordinary, congenital causes. To step out of this realm of producing agencies is to encounter the seductive fallacies of superstition. So they say. This article is not intended to deal much with causes. It may be privileged to say there are possibly larger circles of physiological motion as there are more extended ranges of astronomical phenomena. The stars perform their revolutions according to a comparatively certain order, yet now and then some one or other of them drops out of sight or assumes some new phase in defiance of the immediate scientific anticipation.

To illustrate the subject further by physiological facts, let us notice some of the odd features of the brain's action. The brain is the great sentinel that stands at the gate of our lives. The importance of the integrity of its functions is daily illustrated, both in the phenomena of health and disease. Yet all things are not yet understood. Passing things that may find an easy explanation, let us turn to matters more occult. There is a medium of connection between the two hemispheres of the cerebellum called the *pons varolii*. At first sight it appears to bear no specially obscure use in the physical economy, yet it has been proved that a slight puncture of it with a sharp instrument will cause the lungs to congest with blood. What is the secret spring of this action? What relation has it to the common forms of lung congestion that may be profitably borne in mind in attempting cures of this disease?

The structure of the brain admits of cer-

tain sinuosities and cavities, all of which are known to the anatomist by their names. Situated between the pons varolii, the cerebellum, and the medulla oblongata is the cavity known as the *fourth ventricle*. Its floor is called the *calamus scriptorius*. Wound this with a sharp instrument and the kidneys will secrete copiously of glucose, or grape sugar. The secretion of glucose by the kidneys is an ordinary feature of diabetes, but what does the above fact signify in aid of remedial efforts as demanded by this malady?

The brain keeps the door of our vitality. No one will be likely to dispute this proposition. Yet the brain itself is not as fastidious in resenting harmful approaches as many other organs of the body. To wound it gives no pain. Nor is there as much direct danger in severely wounding the cerebrum, the principal bulb of the brain, as many imagine. Bullets have been shot through it, splinters have been thrust into it, and death has not resulted. In the year 1828 a man in Cavendish, Vt., by the name of Gray, sustained the passage of a tamping iron used in blasting stone, through his cerebrum. The missile was shot out of the rock by a premature blast, and, striking near the right cheek, it passed through his head and came out at the top. Gray lived many years after it. The experiment, however, is one that had better not be tried at random. It is one of those things that can't be done every time.* The fact that it is proved possible for the brain to sustain such an injury as this would seem to annul the anticipation of any ills coming from a source so ordinarily unusual as the one implied in the narration we are about to render.

In the year 1870, Lawrence Rapps, residing near Monroe, Michigan, was insane. It became necessary to remove him to the lunatic asylum at Kalamazoo. The deranged man, his brother, and an officer, started for the latter place. Taking the cars, the two brothers occupied the same seat. In the course of the journey the supposed well brother exhibited marked signs of melancholy and distress of mind. The abnormal condition was gradually intensified. Before

the unhappy group reached their destination both brothers were raving madmen, fighting like wild tigers of the jungle. This interesting though painful fact is less difficult of explanation than the others we have mentioned. The study of the diversities and relations of human temperaments will aid in the solution of the problem. Certain constitutions seem to be related to certain others in a manner analogous to conditions existing between the different poles of a battery. When two electricities meet, one is sometimes neutralized, as it were, passing its identity over to the other; or two substances of opposite electrical conditions may be made alike by contact. The latter suggestion seems to better explain the case in point, especially as it was observed that as the well brother gradually became crazed, his insane companion by degrees grew calmer.

The study of the faculty of common consciousness develops one of the most intricate themes of scientific investigation. The location of the sensorium is a matter of difficulty. Certain phenomena, however, would seem to indicate that it is hardly probable that the function of common consciousness pertains to the whole brain; or, if it were otherwise, none of the special powers of thought and intelligence could be manifested in an unconscious state. Illustrative of "unconscious cerebration," Dr. Carpenter relates the case of a lawyer who labored in vain upon a professional opinion till he awoke one morning to find he had written out the same during the night, while in an entirely unconscious state. So Dr. Blacklock conversed, dined, and sang, all the time having no intelligence of the acts he was performing. Some argue the dependence of consciousness upon the integrity of the functions of the ganglia at the base of the brain, but whether the proposition is proved or not is not within our privilege to say.

Not the least curious among the various peculiarities of brain action is that which indicates a response to the special effects of certain foreign substances introduced into the system. It has long been known to observers of physiological phenomena that particular substances not only produce general effects upon the human system, but also their presence in the body is an earnest of certain

* A full account of this accident and its effects on Gray were published in the PHRENOLOGICAL JOURNAL.

characteristic results depending upon each individually. Indeed, we are not prepared to assert but that this may be true of everything with which we come in contact. To explain the principle, we present a few illustrations. Aside from any general effects they may engender, mercury will stimulate the liver, tobacco the gastric glands of the stomach, alcohol the brain. Nor is it true that the special effects of any drug, for instance, are confined necessarily to the material function of one organ or assemblage of organs. The visitation extends even to the palace of the emotions and the castle of the mind. Ammonia and its preparations, as well as musk, castor, wine, and ether, stimulate the imaginative powers. The empyreumatic oils produce melancholy and hallucination. Arsenic causes lowness and depression of spirits, while gold elevates and excites them—a statement not likely to be denied when presented as a material fact. Opium also enlivens the imaginative powers, and in some persons induces inordinate loquacity, a fact more especially asserted of muriate of opium (Dr. Gregory). Belladonna impairs the intellectual faculties. Conium dulls and deadens them. Hemp incites gayety of spirits; it enters into the composition of a liquor said to inspire to deeds of bravery in war. But such and similar effects, all injurious in their ultimates, might be ascribed to a great variety of substances more or less commonly known.

But above and beyond all these things the living body testifies of the approach of agents of good or hurt that hardly enter and course through its channels. No doubt many substances enter the body by inhalation, and manifest their characteristic subtile effects, yet marked physiological and correspondingly mental results spring from causes less intimate. Some persons can never approach certain particular objects without realizing a disturbance of their serenity that amounts to a mental frenzy. Certain colors may make the body sick; a dingy yellow has turned many into the paths of bodily ill. Astrology is based upon the theory of intimate relations existing between our bodies and the planetary and stellar orbs. Presuming on the correctness of certain data observable in the starry skies, Dr. Trall sets forth that—

“We are approaching the climax of a pestilential period. From 1880 to 1885 the planets Jupiter, Saturn, Uranus, and Neptune will approach the earth nearer than they have for eighteen hundred years. Whenever any one of the four has come near enough for us to feel its influence, pestilence, famine, and extremes of heat and cold have been found the result. Now we are to have the influence of the four combined, and he predicts that in seven years from now all manner of evil which grows out of atmospheric changes will be upon us. To lessen this calamity the world is urged to use the strictest sanitary measures, and by health and cleanliness counteract the effects of our unwelcome neighbors. The world is better able to take care of itself than it was two or three hundred years ago, and by care we may avert much of the danger. The dissipated, the glutton, the debauchee, may calculate on being the first victims. Young men who devitalize themselves by tobacco using, young ladies who destroy one-half of their breathing capacity by fashionable dress and tight lacing, will never survive the perihelion of all the large planets of the solar system.”

We are not scientifically capable of estimating the intrinsic value or worthlessness of all this, but simply suggest that if Dr. Trall induces any of our American people to follow more consistent habits in the disposal of their individual personalities, he will not have prophesied in vain.

In closing this article we step for a moment upon the border land of physical dissolution, and note that which may some day convey a more generally recognized significance. “The King of Terrors Discrowned” was the subject of a somewhat recent magazine article arguing the serenity of the dying. Be this as it may, the fact exists that as the physical circulatory powers are directed inward upon the mucous surfaces of the body an engorgement of the brain vessels follows. This condition of things is often observable in general chronic illnesses, when the thoughts of the mind often move with a degree of abnormal activity that sometimes becomes painful. A similar liveliness of expression is often noticed as individuals are approaching the great beyond. In many in-

stances the highest anticipations are realized. Starving men look forward with joy to the gustatory pleasures upon which they insist they are about to enter. The drowning see visions more beatific than often fall to the lot of the normal imagination. Many a death-bed has witnessed a spirit of exaltation as the subject has closed the door upon this present world.

HYDROPHOBIA INDUCED BY FEAR.

THE *Oneida Circular* copies the following from an exchange: "It is a well-known fact that several persons may be bitten by a mad dog, and only one, or none of them, die of the disease. Such was the case when Mrs. Noyes, of New York, was attacked a few weeks since. Two or three persons were bitten at the same time by the same dog, who are alive now, and likely to be for many years, and who, in all probability, will never suffer the slightest inconvenience from the bites they received.

"Hydrophobia is not unfrequently a disease purely of the imagination. Some time since a man in Chicago was bitten by a dog that was known to be perfectly well. The victim, however, brooded over the idea that sooner or later he would die from the effect of the wound, although there was no manifestations of a serious character. But his apprehensions made him anxious and restless and almost frenzied, and in a few days he brought upon himself fits of an alarming type. From all the circumstances it was evident that the man was in a dangerous condition, and needed some medical attention. Physicians were called, but he soon expired in great agony. From beginning to end, this man's case, so far as the dog was concerned, was one entirely of imagination. Dr. Marx, a celebrated German physician, writing to *The Clinic*, says that he regards hydrophobia as a morbid affection, induced by fear, and in support of his opinion, cites many interesting cases. Dr. Luke, in his work on the "Influence of the Mind on the Body," supports the hypothesis that hydrophobic symptoms are often developed without previous inoculation, and he relates a notable instance of a physician of Lyons, who, having assisted in the dissection of several victims of the disorder, imagined that he himself had become inoculated. On attempting to drink he was seized with spasms of the pharynx, and in

this condition roamed about the streets for three days. At length his friends succeeded in convincing him of the groundlessness of his apprehensions, and he at once recovered.

"No dog will bite unless he is provoked, or is disturbed in his guard over his master's property. A mad dog seeks to avoid the highway, will never go out of his course to bite, but will finally, if let alone, drop dead without doing the least injury to any one.

"Lastly, the disease is not, as is generally supposed, incurable. There are many persons who have had hydrophobia and have recovered from it. Dr. Buisson, a distinguished French physician, says he never knew a case to fail of recovery where the patient was repeatedly placed in steam baths varying in heat from 57 to 63 degrees centigrade."

[Yes, and wet-sheet packs will take the poison out of a person much more effectually than can be done by any amount of physicking or dosing. In the bite of a mad dog there is a poison virus, which may, or may not, kill, depending on temperamental conditions in the man. It is quite true that "the mind kills and it cures." When this thing comes to be understood by medical men, there will be less dependence on poisonous drugs and more on common sense.

But coming back to dogs; we beg to ask, Why keep them at all, especially in cities? Their noisy barking keeps nervous people awake at night; they often fight; they drive poor puss out of the house, which she keeps clear of rats and mice. "Oh, they are so intelligent!"—so is a monkey. Why not cultivate monkeys? "A shepherd dog is really of service." Yes, and may be retained as such; but let us get rid of all the rest. Bad dogs kill more than *six millions of dollars worth of sheep* in these United States every year—a bad loss, and what have we to show in return?]

TAKING COLD.—A cotemporary truly says: The secret of avoiding the unpleasant consequences thought to spring wholly from the action of cold upon the body has very little dependence upon exposure, but a great deal upon an impure and weak condition of the vital processes. In other words, with an average or superior constitution, and an intelligent observance of all the laws of health, men and women might be exposed to the action of cold to a degree equal to the beast of the field, and with like impunity. But in

the case of persons with feeble constitutions, and who disregard knowingly or otherwise—and most frequently otherwise—the conditions of healthy existence, no degree of care will prevent the taking of cold, as it is termed. On the other hand, those who, like the late Sir Henry Holland, are of good constitutions, and living in accordance with the laws of health, may travel, as he did, from the tropics to the arctics and scarcely know what it is to have a cold, or sickness of any very troublesome kind.

CHARACTER-READING.

IT would be amusing, if it were not painful, to contemplate how much more interest is manifested by the people to learn everything else first, and learn of themselves last, if at all. When we remember that mind is at the center of all action, the source and root of character and power, it would seem that this great central element should be among the most studied subjects. The greater part of education and of governmental administration resembles the calking of the lower side of a dam, or painting the outside of a cistern to prevent its leaking. Men do not seek to go to the source of evil action. They let the mad dog bite six children, and then heroically kill him; they permit the man to become a raving maniac from drink, and then sagely and ignorantly punish him for the broken heads and glass that have become his victims. The man who becomes a successful detective in ferreting out and tracing crimes home to the criminals, is applauded, and justly enough. Would it not be wiser and easier to study the little culprit before he commits depredations, and so train him and regulate his conduct that he shall become a virtuous citizen? Men clamor for “the liberty of the individual,” and we do not see exactly how it can be lawfully restricted; but when that liberty becomes license, and the infuriated madman, made so by drink or by drugs, scatters death and desolation around him, we spend money by the mint to punish the guilty, yet fail to nip the difficulty in the bud.

A practical phrenologist, if he could have the uncontaminated boys under his hands for half an hour, would be able to determine

beforehand who would be most likely to become perverted, debased, and demoralized by temptations in respect to food or drink; or who would become violent in temper, or salacious in desire and habit; and he would also be able to give to parent or teacher such suggestions as would, if followed, save ninety-nine in a hundred of those who would go to ruin from being overcome by temptation through their strongly marked faculties.

We should study the natural character and disposition of children, and apply to each child such training and discipline, such instruction and guidance as will enable them to resist the temptations which most naturally assail them. One is assailed by vanity, another by appetite, another by passion, another by inordinate love. One is tempted to steal, another to lie, and another has strong temptations in the direction of profanity. Some organizations are more adapted to one kind of vice, and some to another.

Our position is, that early training, according to the doctrines of Physiology and Phrenology, would enable parents to save nine out of ten of their children who now “go to the dogs.” We would see mothers studying the mental dispositions of their children, their physical constitutions, their tendency to virtue and to vice, as well as studying the fashion-plates and the luxurious cook-books. Is it true, and must it always remain so, that people study things extraneous? They do not study mind, motive, disposition and character, and the doctrine of human depravity has a thousand painful illustrations now where it might not have ten, if the young immortal could be thoroughly understood and rightly guided. Is there anything the mother yearns for more than to have her children good and wise, true and excellent? Is there any subject in respect to which she knows less? We would have mothers study Phrenology and Physiology, so that they might understand the minds and the bodies of their children, and guide them thereby into duty, usefulness, honor, and happiness. If they can not read their characters themselves, let them employ those to do it who make it a business. We employ ministers to inculcate moral and religious ideas; we employ physicians to rectify the wrongs of the body; we employ the tailor and the dress-

maker to clothe the body; why should we not employ those who can give us advice as to the training and culture of the more important part of the child's nature? Most grown men and women trained as they are training their children, have come up to manhood and womanhood more ignorant of their inner life than they are of almost anything else. Such persons can receive suggestions through Phrenology that will be of more value to them than they can possibly imagine.

Those who would learn the art of character-reading; those who would acquire a knowledge of the philosophy of human life, and prepare themselves to do the world a signal service, can receive instruction on the subject in our annual classes, which commence each year early in November. Any information which may be desired will be furnished by circulars respecting our course of instruction. They will be sent to any persons who may ask for them.

Department of Literature, Science, Education.

JEREMY BENTHAM

AS A LAW-GIVER, PHILANTHROPIST, AND REFORMER.

IS it not high time for the real character of this man to be understood by the people? Consider their obligations to him. For well-nigh a hundred years he has been a problem and a myth—a problem to the few, a myth to the many; most of the time a subject of unsparing ridicule and misrepresentation; and this, be it remembered, by such journals as the *Quarterly Review*, the *Edinboro'*, and *Blackwood's*, and by such writers as Sidney Smith, Jeffrey, and Hazlett; and then, after a long while of unbounded and extravagant admiration, by such men as Lord Brougham, Dr. Parr, Sir Samuel Romilly, George Grote (the historian), Sir James Macintosh, Sir Francis Burdett, Sir John Bowring, Roebuck, the two Mills, father and son, the two Austins—to say nothing of Albert Gallatin and Aaron Burr—and many others of their day. Standing head and shoulders above the rank and file of reformers, all of whom were proud to be reckoned among his disciples before he passed away, and all of whom, without a single exception, whether abroad or at home, owe most of their reputation as reformers to their great master, who furnished the material which made most of them famous.

AN ENIGMA.

Nevertheless, and notwithstanding this great change with the few, Jeremy Bentham is still a myth and a sphinx to the great body of the people for whom he labored so

long and did so much; but even to the foremost lawyers, reformers, jurisconsults, and statesmen of our day, both in England and here; and this, while among other nations, like France, Russia, Spain, Portugal, South America, and Sweden, he is more studied, better understood, and more heartily revered than at home; and even here, though, as a people, we are strangely ignorant of his doings, and of our obligations to him, by not a few of our great lawyers and law-givers, he is better known and more highly appreciated than in Westminster Hall or the Court of King's Bench.

Yet even these, when they happen to meet with anybody who has ever known Mr. Bentham, personally and intimately, never fail to show by their very questions how little they know of his doings and purposes. One would be led to think, sometimes, that they were questioning some favored disciple of Socrates or Pythagoras, Plato or Bacon, feeling after the truth and groping in the dark—in other words, running for luck.

The gross caricaturing and extravagant misrepresentation of his *Benthamée*, as Sydney Smith called his language, his "Defense of Usury," his "Scale of Persuasion" for estimating the probative force and reaching the sum total of testimony or evidence by arithmetical computation, his "greatest happiness principle"—the "greatest happiness of the greatest number," his scheme of universal

suffrage, including woman suffrage, his utilitarianism, his panopticon, or inspection-house, a prodigious idea for prisons, poor-houses, hospitals, lunatic asylums, and manufactories, where a single overseer might do the work of a dozen, or twenty—or even a hundred guards or watchmen, and his “*Christomathia*,” published in 1816–17, a system of school instruction for the higher branches of learning, with an essay on nomenclature and an examination of Bacon’s encyclopedical tables improved by D’Alembert—all these they were quite sure to remember something of—enough to puzzle over or laugh at, if nothing more; but very little of the great and truly amazing changes in jurisprudence and legislation, which have taken place throughout Christendom; and all originating with him. But, leaving these considerations, let us look at Mr. Bentham, as a law-giver and philanthropist; bearing in mind that all his works from the outset of his career at the age of twenty-eight, however incongruous and remote, were “all but parts of a stupendous whole.”

A MAN WITH A PURPOSE.

Beginning with his “*Fragment on Government, or a Comment on the Commentaries*” (of Blackstone), in 1776, up to the last year of his life (1832), he had but one object; and as he drew near the end of his long pilgrimage, all these apparently incongruous materials began to shape themselves and drop into their places with a self-arranging power, until a system appeared which nobody had thought of till they saw the scattered fragments of a dissected map crystallizing into states and empires. His “*Springs of Action*,” “*Fallacies, Logic*,” etc., etc., are all pre-arranged portions of the great whole. Two or three leading manifestations are all that need be mentioned here. Let us take up and dispose of some few among the ten thousand absurdities charged upon this great law-giver.

“SCALE OF PERSUASION.”

And first, nothing would seem to be more preposterous and visionary than his plan for estimating the value or probative force of evidence. He proposes a dial-plate with index and numbers for the help of jurors and judges—each man to set the index against the number which, in his judgment, would

be the probative force of any evidence, whether circumstantial or direct. How foolish and how utterly useless! exclaims the well-read and well-trained lawyer; and inasmuch as “law is the perfection of reason,” and the most reasonable and satisfactory department of law, that which relates to evidence, with all its qualifications and exclusions, he has no patience whatever with such miserable crotchets. But has he never happened to hear of just such a scale employed by the celebrated De Piles in estimating the merits—the evanescent characteristics of such painters as Titian, Rafaelle, Velasquez, Rubens, Rembrandt, Vandyke, and others? The scale he adopted was often degrees for each separate property, and by its help he succeeded in estimating and comparing, to the acceptance of all, the composition, coloring, drawing, tone, and management of all the great masters in such a way that they could be understood at a glance. And men of science and literary critics are beginning to use a similar scale for their computations.

That objections may be urged, and very serious objections, must be acknowledged, for even Mr. Bentham admits that “an infinite scale would be the only true one”—but being inapplicable, we must be content with what may be used in practice, a finite scale. And if such a scale, graduated like that of De Piles, may be used to advantage by certain persons, why not allow them to use it, whether jurors or judges? Even the telescope of Lord Rosse does not take you all over the heaven of heavens, nor through unlimited space; yet, nevertheless, it may be better than a microscope or an eye-glass for the patient inquirer.

But further. Bear in mind that we have in the Roman law, in the Trench law of the Roman school, and even in our English law, what corresponds in principle with this very scheme of Mr. Bentham.

By the Roman law, according to Herneccius, they had four degrees of persuasion for weighing evidence. 1. Full. 2. More than half full. 3. Half full. 4. Less than half full. By the English law, according to Lord Coke, we have: 1. Positive proof. 2. Violent presumption. 3. Probable presumption. 4. Light or rash presumption. And these four degrees are illustrated as follows: 1. Di-

rect evidence, however trustworthy. 2. Circumstantial, however great the force, "violent presumption being sometimes equal to full proof," saith Lord Coke, "while probable presumption hath its due weight, and light or rash presumption has no weight at all." So much for English law, to say nothing of American law, built upon English law, so that the judges of Westminster Hall continue to "rule our spirits from their urns," all their crotchets being adopted by us, without qualifications or remorse, until within a few years.

And what says the French-Roman law? According to Jousse, and the books we are most familiar with, it has only three degrees of comparison: 1. The highest evidence to warrant conviction. 2. Urgent and indubitable evidence to be weighed and measured—but how? 3. Less than most urgent. And yet these divisions have never been regarded as either preposterous, or useless, or frivolous.

Compared with the graduated scale of Mr. Bentham, by a patient, logical, and clear-headed man, whether judge, lawyer, or one of the *law-givers*, which of all three would he be likely to prefer? And which would have any chance against the index and scale of Mr. Bentham? Of the whole four systems, what would be the safest and best in practice?

HIS DEFENSE OF USURY—LAW REFORMS.

But this greatly misunderstood scale for weighing evidence, after all, was only one of many strange heterodox notions which made the philosopher of Queen Square Place a by-word and laughing-stock for half a hundred years, while others were stigmatized as little short of blasphemy, atheism, or downright hallucination.

For example: He undertook the defense of usury, though denounced in the Scriptures, and by Aristotle, and by all the lawyers we know anything of, although it was allowed in the Hebrew commonwealth against strangers, and everywhere else under certain legal provisions which prevented borrowers from making the best bargain they could, lest forfeiture should accrue to the lender.

He urged with arguments which are beginning to be regarded as unanswerable, the abolition of oaths, as being both useless and mischievous. He proposed a radical and

thorough change in most of the leading principles of evidence, allowing parties to testify, whatever their interest might be, and whatever their disqualifications; and even husbands and wives to testify against each other, not only in civil, but in criminal cases, leaving the jury to judge of their truthfulness in all cases. He allowed married women to acquire and hold property as if unmarried. He insisted upon a public defender being employed by the state, and paid by the state for the help of criminals, whether poor and friendless, or otherwise. And why not? Since we have public prosecutors, and in England, until very lately, no criminal could have fair play, though he employed counsel, except on the examination of witnesses. In Maine we have already begun this by employing and paying counsel for a murderer.

And now, after many years of denunciation and outcry, where are we? The usury laws are either abolished so that a borrower may bargain for money as for anything else, or so qualified and modified that the foundations of the whole system are broken up; married women are allowed to acquire and hold property, to testify against their husbands, and in some cases to hold office and vote; and the lawyers and judges of our day are beginning to question the efficacy of oaths, as they have done for a whole generation in the Custom-house. And all these changes have been working their way like hidden fire, silently, but effectually, up into our halls of legislation and senate chambers, for the last forty years.

For example: In the month of February, 1829, Mr. Appleton, the present Chief-Justice of Maine, wrote an essay for the *Yankee*, the first article he ever wrote for any paper, he says, under the title of "Rate of Interest and Usury Laws," and before he knew anything of Bentham, or even suspected the source of that deep, thrilling vibration, which has begun to be felt in all our commercial centers and halls of legislation; and a very able essay it was, too. Though strictly anonymous, it was received with great favor.

And again, in June, 1829, he wrote and published another capital essay for the *Yankee*, "On the Admissibility of Atheists as Witnesses," by which time he had become acquainted with some of Mr. Bentham's

views; and yet, unwilling to amaze or exasperate public opinion, he withheld his name, and nobody suspected the author for many years. But now, having reached the highest judicial position among us, he would not venture to be anonymous. And the generous contagion is still spreading, so that multitudes of our foremost thinkers are beginning to wonder at their unaccountable sluggishness for so many years, where so much of human happiness and public safety were in issue, and so much of the very foundations upon which our system of legislation and jurisprudence are built, was solemnly questioned.

"THEORY OF REWARDS AND PUNISHMENTS."

Probably no work on criminal procedure ever made such a profound impression as Mr. Bentham's "Theory of Rewards and Punishments," his earliest work, though not published until Dumont, of Geneva, recast the whole in French. The "Fragment on Government, or a Comment on the Commentaries," first appeared in 1776, when the author was in his twenty-eighth year. A new edition appeared with a new preface, which Mr. Bentham was prevailed upon to suppress, about the year 1823. The book itself was a terrible dissection of the Commentaries; and the language was so beautiful and clear, and the logic so irresistible and conclusive, that, for a long time, it was attributed to Lord Mansfield; but Lord Mansfield was never equal to much that appears in this remarkable work, which might be characterized in one word, as tremendous. The lawyers of that day were sadly frightened and puzzled, until the true author began to be suspected, when they revenged themselves by abusing and ridiculing him, and all that he had done, saying, and certainly believing for a whole generation, that he had "a bee in his bonnet" and was not worth minding. But how is it now? How with him? and how with them? While they are forgotten or only remembered as his calumniators, he has been growing, year by year, like a Titan, working his way over the Hartz Mountains.

HIS PRISON SYSTEM.

And, now, one word of the "Panopticon," which, though "mightily abused" like Old Lear, has well nigh revolutionized the whole system of penitentiaries throughout the

whole world. What was it in fact? and what had it to do with criminal jurisprudence? and what with humanity, and common sense, and political economy? It was a plan for the arrangement of prisons, penitentiaries, lunatic asylums, alms-houses, lazarettos, hospitals, schools, and factories, whereby the expenses of management would be greatly and certainly lessened, large profits obtained, the safety of prisoners, criminals, however desperate, madmen and other unfortunates would be secured, with correspondent advantages to the community and State, when occupied for schools, hospitals, or manufactories. It first appeared in 1791, with drawings, plans and specifications, whereby it was so clearly demonstrated that the expenses of superintendence and watchmen, guards, etc., would be so astonishingly lessened, and the great objects of imprisonment, even for life, so certainly effected, that the British government, under the leadership of Pitt and Lord Melville, adopted the scheme, after deliberate investigation; and lands at Mill Bank, half a mile in length, where the Mill Bank prison, a miserable nightmare at best, now stands, were assigned to Mr. Bentham "for a long term of years," but, according to the "Hand-Book of Modern London," conveyed to him in fee simple at the cost of half a million sterling. "It stands like a fortress on the left bank of the Thames, near Vauxhall Bridge, on lands bought in 1799, of the Marquis of Salisbury, under an act of Parliament, August 20th, 1812. The outer walls inclose about sixteen acres. Its ground plan resembles a wheel, the governor's house occupying a circle in the center, from which radiate six piles of building, terminating outwardly in towers. It was first called the penitentiary, and then by 6 and 7 Victoria, c. 26, the Millbank Prison. It is the largest in London, and is capable of holding 1,120 prisoners, though the average number is only about 700. The yearly cost for 1,000 prisoners is £28,643 (about \$143,000), and the value of their labor only £2375 (\$11,900)!

But the government broke faith with Mr. Bentham, and bought him off for some ten or twenty thousand pounds, leaving the Millbank abortion a perpetual witness of their blundering audacity, the failure being well known at

the time to be owing to the personal pique—the “unassuagable hatred”—of George III. to Jeremy Bentham, because of the part taken by him in defense of the French Revolution, and also his work on the judiciary establishment, 1790–91—following a newspaper controversy between his majesty and our philosopher on the troubles with Catherine II. and Gustavus of Sweden.

THE ARRANGEMENT.

But the Panopticon originated with General Sir Samuel Bentham, a younger brother, and not with Jeremy. Both were in White Russia, while the general was in command of a large military force under the Empress. It was intended for a manufactory; but our law-giver, who was always on the alert with outstretched arms and wide-open eyes for whatever would help forward his magnificent scheme of rewards and punishments, and this happening to be just what he most needed at the time, he seized and appropriated the idea at once. At first he intended to have the building circular, but after awhile he changed it to a polygon of twenty-four sides. The walls were to be honey-combed with cells for continual inspection, for economy in labor, materials, machinery, tools, etc., etc., and any two cells might be thrown into one. The diameter of the building was to be 120 feet. It was to be upheld by cast-iron pillars for economy of space and safety, and the galleries, doors, and stairways were also to be of cast-iron—and these, be it observed, were the first suggestions of what we now see everywhere in buildings of this kind; and he proposed flooring the cells with plaster. It was to be supplied with water by an annular cistern round the top of the building, under the roof, and just within the wall. The inspector's lodge was to be so contrived as to occupy the center of the building and be surrounded by a sort of annular well, or space, all the way up, and to be so divided that one person could have a view of two stories of cells *and see what every prisoner was about*, by merely turning his head at any moment of the day. It would be altogether beyond the reach of attack, and would be commanded by the governor's lodge, so that *no prisoner nor inspector could ever be sure that he was not observed*. It was to be warmed by flues and

pipes, leading fresh air through heated vessels—our actual steam-heating apparatus—and the chapel being in one of the inspection lodges, would give all the prisoners the advantage of the services without bringing them together, or even permitting them to see each other.

There was to be an uninterrupted skylight as broad, and opening into as many places as possible “with a view to airiness, lightsomeness and increased security”—above all things, to airiness, the want of which, it might not by any other means have been very easy to remove.

This vacuity does service in many ways. It is a ditch, a fortification, a chimney, and much more than a chimney for ventilation. The distance between the particular ceiling and the general skylight is so much added to the height of the ceiling in each cell, so that instead of six cells, each eight feet high, and no more, we have, in fact, six cells, one of sixty-six feet, another of fifty-seven, a third of fifty-eight, a fourth of thirty-nine, a fifth of thirty, and the lowest not less than twenty-one, that being the least distance from the bottom of the highest range of cells to the top of the skylight. All these measurements were in compliance with the penitentiary act of England. Not more than eleven feet and not less than nine being the height prescribed, but Mr. Bentham, we see, managed to save largely in space, and yet give a prodigious elevation to the cells. The Wynondam House took the medium between the two extremes, with a correspondent *waste*.

PHILANTHROPY.

Here we see the great law-giver providing for the comfort and health of the most hardened criminals, with characteristic foresight and benevolence. Other details were had for clothing, diet, cleanliness, change of labor, exercise, etc., etc., accompanied by estimates and tables. Two meals a day were allowed, and among other provisions for health and safety, wooden shoes, being drier, cheaper, and incapable of being used for climbing or escape without betraying the party. The doors of the cells were to be opened and shut with a pole. Instead of a stairway, a crane was to be used for supplying machinery, provisions, materials for work,

etc. The ports were to be reduced to three narrow passages on each side, and these were to be crossed and guarded by doors of open-work, exposing the enemy while keeping him at a distance.

ADVANTAGES DERIVED.

And, now, what were the obvious advantages of a system so utterly opposed to every other existing at the time the Panopticon was adopted, or in use now, notwithstanding the simple fact that all the improvements in our States prisons and penitentiaries and hospitals, without a single exception, may be traced to the Panopticon of Jeremy Bentham, the most extraordinary and the most generally misunderstood of all his projects even to this day?

Let us look at some of these advantages. 1st. There is no cell of which some part is not visible from every story of the inspection-tower, and in the lowest story, not only from the inspection-gallery, but from the inspection-lodges. Have we anything like this, or anything to compare with it in any of our prisons, penitentiaries, hospitals or almshouses? And if not, why not? 2d. The part thus visible is large enough to receive and expose perfectly to view a greater number of prisoners than are ever to be lodged in the same cell. 3d. No prisoner can make an attempt upon the grating that forms the interior boundary of his cell without being visible to every one of the three stations in the inspection part. 4. During meals and at church-times, two out of three inspectors may be spared by stationing the prisoners close to the grating. 5th. The cell galleries are commanded by every station in the inspector's part. 6th. No attempt upon the window in the third story of the cells could be made without being visible to the second and first, nor upon a window in the fourth story without being visible to the inspector of the third and fourth stories. Those of the fourth and fifth stories would be inaccessible, upon the supposition that the cells furnish no ropes or materials of which ropes might be made in a single night by persons constantly under the eyes of a patrolling watchman. 7th. To give the inspector at all times the same supervision of a fellow-inspector as a boundary line might be fixed, over which the prisoner should not pass.

So long as he keeps within that line he is in view, and the moment he disappears the alarm is taken.

THE MILLBANK FAILURE.

And these—*these* are all the provisions which were so denounced and finally disregarded in the great Millbank "fortress," and the consequences were inevitable. The scheme was dishonored and betrayed. Manufacturers employing a thousand men, paying them their day wages, and having very little of the control we see provided for here, grow rich and become millionaires. But here, though no wages are paid and the diet and clothing are all of the cheapest character, the establishment runs behind at the rate of \$131,000 a year while housing only 700 laborers! Why, even here in Maine, we get a revenue from our prisoners over and above all costs and charges, and there are other self-supporting establishments, almshouses and reform-schools, and this under the greatest disadvantages compared with Jeremy Bentham's plan.

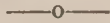
Such was the author's confidence in the scheme as reformatory, productive, and safe, that he offered to receive all the convicts sentenced to transportation at the actual cost to the government, give them a trade, set them to work, and pay for every escape, every death and every relapse; to establish what he called a "Bettering House," where the best of his apprentices might enter half way into the world with a new character and some capital, acquired while in the penitentiary, by sharing in the profits of their labor.

But once more—enough. When railways were first projected, and telegraph by land and sea—steam navigation—photography—penny postage, ether, and lucifer matches, they were all treated as so many crotchets. But who would give them up now? Who would forego their every-day advantages now that they are in such general use? They are already necessities, and so are many of Jeremy Bentham's freaks and crotchets, and *others must follow*.

JOHN NEAL.

So long as men exhibit much weakness in the administration of their private affairs, so long will their attempts to govern others be attended with mistakes, oppression, and the results of such weakness, revolutions, etc.

TELESCOPES IN AMERICA AND EUROPE.



THE interest awakened by the late celestial visitor, Coggia's comet, together with the elaborate discussions of its nature, course, and probable relations to our solar system, which have appeared in the columns of so many newspapers and magazines, has drawn public attention to astronomical subjects, and distributed more real information concerning the revolving worlds that hem in our little globe on every side, than almost any other similar event of the past.

Of course all the readers of the JOURNAL, great and small, saw the beautiful comet, and it would be difficult for us to add a word to what they have read and heard about it. But of those wonderful instruments which procure the information for us of the approach of such visitors, and enable observers to read their nature, and minutely to determine their course, and also enable the astronomer to read the language of the myriad spheres that glitter in the sky of night, it is our purpose at present specially to treat.

We naturally introduce first the telescope of the government observatory in Washington, which was constructed by Alvan Clark & Sons, of Boston, the well-known telescope makers. This firm, which reflects great credit upon American science and enterprise, has supplied some of the best observatories in Europe with large refractors. The first instrument the firm made was a five-inch reflecting telescope. They were greatly encouraged by this first success, and made larger and larger telescopes. In 1862 Mr. Clark finished the largest refracting telescope which the world of science could boast at that time. The aperture of its object glass was eighteen and a half inches—three and a half inches more than those of the famous refractors used at the great observatories of Pulkowa and Cambridge. With this telescope the satellite of Sirius was discovered. In consequence of this the French Academy bestowed the Lalande medal—an annual reward for the most interesting discovery made during a year—on Mr. Clark. A great refracting telescope was sadly needed at the Washington observatory. The subject had frequently been mooted in Congress, and various suggestions had been offered in regard to the purchase of a more powerful glass, worthy of the National Observatory, and at last \$50,000 was appropriated for the purpose. The objective, made in Boston, has twenty-six inches

aperture. The making of such a large instrument is attended by a great many difficulties. The glass discs for the lenses were ordered in England, but more than a year passed before they could be completed. The cost of the necessary dome and apparatus, together with the glass, has exceeded \$60,000, but the country possesses an instrument creditable to it.

THE CINCINNATI OBSERVATORY, which has existed for more than seventy years, purchased, in 1845, a telescope with an object-glass of twelve inches aperture, of Merz & Mahler, of Munich, for about \$10,000. Under the supervision of the late Professor Mitchell, a fine observatory was built. The telescope had five eye-pieces and nine micrometers, with 1,400 power and the necessary clock-work for steadily viewing a star. A view of this instrument and its equatorial mounting is given by the illustration. In 1870 a new and larger site for an observatory was given by Mr. Kilzour, one of the most prominent and active citizens of the place. The building will be much larger and handsomer than the old observatory.

NEW YORK

has a number of telescopes which are worth mentioning.

At Hamilton College there is a fine telescope with an objective of thirteen and a half inches aperture. It is with the assistance of this instrument that Professor Peters has discovered so many asteroids as to identify his name with that department of research.

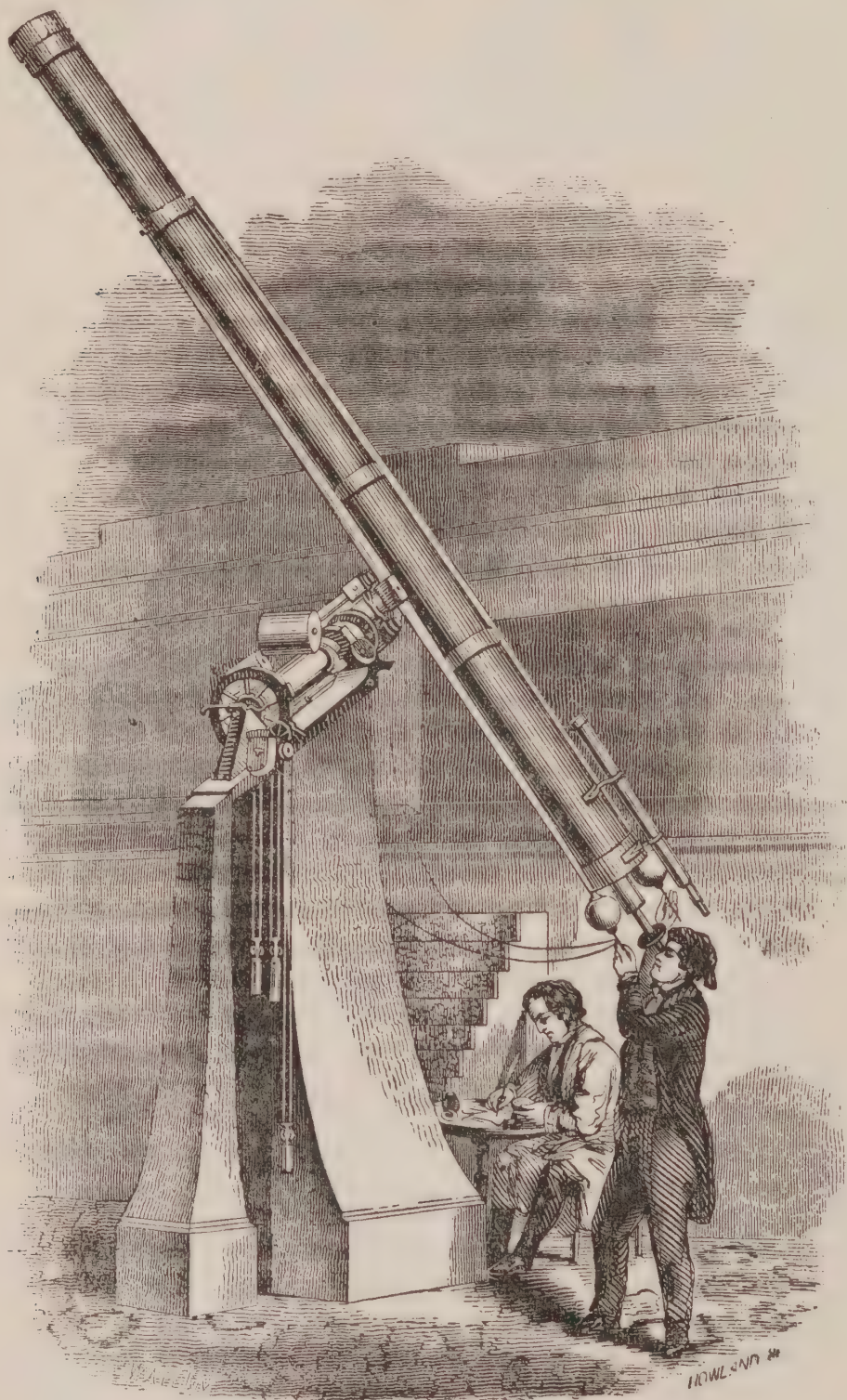
Then there is the refractor at Dr. Rutherford's observatory in the city of New York. This gentleman has devoted much of his time and wealth to the noble science of astronomy. He has made, with the exception of the mechanical work on the objectives, telescopes himself. The first instrument which he used in 1864 for photographing stellar groups was a refractor of eleven inches aperture, with two distinct glasses, composed of two lenses each, one for photography and the other for vision. His present telescope is of thirteen inches clear aperture, and has an additional lens. This lens is so constructed that it shortens the focus about one-seventh. It has about six eye-pieces and a magnifying power of 1,500. The telescope, with its mounting apparatus, etc., is worth about \$10,000.

Mr. Henry Fitz, of New York, and also his son, have contributed in no small degree to the reputation of Americans, by making object

glasses for telescopes. Those in Mr. Rutherford's telescopes were made by Mr. Fitz, in accordance with formulæ calculated by Mr. Rutherford. In all cases, so far as the writer is aware, the Fitz glasses have sustained comparison with the best European manufacture. One of them, of thirteen inches aperture, was

Mr. Campbell, also of New York, has a twelve-inch glass in his observatory on the Brooklyn Heights. Its focal length is thirteen feet.

At the Columbia College there is a small telescope of five inches aperture and six feet focal length, which is mounted on the green



TELESCOPE, WITH EQUATORIAL MOUNTING.

made for the Dudley observatory at Albany; another of twelve and a half inches is used in the telescope at Michigan University, while many other observatories, private and collegiate, in the United States are furnished with Fitz's objectives.

for the instruction of the students. It was made by Alvan Clark, and is worth, probably, \$900 or \$1,000.

Mr. Harrison, connected with the Board of Education, has a six-inch glass, and Mr. C. W. Plyer, of Plainfield, N. J., a gentleman well

known in the higher mathematics of American life insurance, has a very fine instrument, the Fitz objective of which is six and a quarter inches aperture.

Professor Henry Draper has a silver glass reflector, of twenty-six inches aperture and fourteen feet focal length, at his residence in Hastings, on the Hudson. This is, probably, the only large reflector in this country, all the other leading telescopes being refractors. Professor Draper's reflector has, probably, cost \$5,000.

Besides the Washington and Cincinnati telescopes there are several, however, which are of considerable size and worthy of mention. Harvard University has an excellent refractor of fifteen inches aperture and 270 in length. It is well mounted, and cost \$20,000. Alleghany, Pa., has a glass of twelve or thirteen inches aperture, and about fourteen feet focal length.

THE CHICAGO OBSERVATORY.

Chicago, which has already a very valuable refractor, will soon possess the largest instrument in the country. Mr. McCormick, of "Reaper" fame, has ordered a refractor of Alvan Clark, which will be of a quarter of an inch larger aperture than the great telescope in Washington. This refractor will cost in the neighborhood of \$40,000.

SAN FRANCISCO,

through the munificence of Mr. Lick, whose career is noted elsewhere in these columns, will soon be armed with an enormous telescope, which will give an impulse to scientific and astronomical research at San Francisco. The observatory, with telescopic apparatus, will cost \$700,000.

THE RUSSIAN IMPERIAL OBSERVATORY.

Let us now turn to the great instruments of the Old World. They are so numerous that we have not the room to mention but a few of them. Probably the most magnificently equipped observatory in Europe is that of Pulkowa, founded by the Emperor Nicholas; its establishment cost \$500,000, and \$50,000 are annually appropriated from the imperial treasury for its maintenance. The telescope at Pulkowa is not a very large one, being only of fifteen inches aperture, but it is wonderfully adapted for separating multiple stars, and under the management of Struve early achieved a great reputation. Up to 1860 it did probably more work than any other instrument in Europe.

In Paris the telescopes in use are mostly reflectors of glass, silvered on the front surface, after Foucault's method. Although Merz, at

Munich, makes so many glasses for all parts of the world, Germany has no monster telescope like Lord Rosse's.

ENGLISH TELESCOPES.

Greenwich, of course, has some fine telescopes, although it is now more prominent as a meteorological and surveying bureau, and as the headquarters for longitudes and latitudes, all the world over, than as an observatory of stellar phenomena.

Lord Rosse's famous telescope at Parsonstown, Louth, Ireland, was completed some twenty-six years ago. It is a gigantic reflector, and has a clear aperture of six feet, and a focal length of fifty-three feet, two specula, one weighing three and a half and the other four tons. The instrument formerly rested upon twenty-seven platforms, which were so arranged that they distributed the pressure equally; and a complete equilibrium of all the parts of the speculum was obtained. Subsequently twenty-seven triangles, each with a ball at the angles, were substituted, so that the speculum rolls freely on eighty-one balls. The telescope tube rests upon a joint of cast iron, which is supported upon stone-work, and can be moved with the greatest ease.

The great Melbourne telescope, manufactured by Mr. Grubb, of Dublin, is of the reflecting order. The speculum is of metal, although the new silvered glass of Foucault is preferred by many astronomers. The point of suspension is near the mirror, and in front of this point the telescope stretches forward to about thirty feet of open lattice work, made of bands of elastic steel.

SOUTH AMERICAN ASTRONOMY.

A few words about an observatory in South America. At Cordova, in the Argentine Republic, Dr. Gould, of Cambridge, Mass., established an observatory where two valuable instruments are used, a Repsold meridian circle of fifty-four inches focal length, and four and a half in aperture, and an equatorial telescope, with an eleven-inch object glass, formerly the property of Dr. Rutherford, of New York.

We can only casually mention a few more of the leading achromatic telescopes. At the Royal Observatory in Munich, there is one of 11.2 inches aperture and 192 focal length; at Paris and Dublin there is one of 12.4 aperture and 206 focal length, and there are others in almost every capital of Europe, and in Madras, Cape Town, and other cities.

A word or two with regard to the discovery and improvement of the telescope must close this sketch. The earliest records of telescope

fabrication date from 1680, when Hans Lippersheim, of Middleburg, applied to his government for a "protection" of an apparatus by which "one could see things at a distance." Jacob Adriansz, of Alkmaar, otherwise known as Metius, made a similar application for an arrangement of magnifying glasses, like that of Lippersheim, shortly after the latter had made his known, and claimed that he had made such instruments two years before. The early telescopes were, of course, simple in form and limited in magnifying power, but they excited the wonder of scientific men, and were eagerly grasped by astronomers. Galileo at once recognized the importance of the invention, and commenced a series of experiments with lenses at Padua, and succeeded in making a telescope for himself, and from that proceeded to fabricate others which revealed many wonders of the heavens hitherto unthought of.

From that time the progress of astronomy was rapid, the researches of Harriott, Kepler, Rheita, Huyghens, Campani, Cassini, Hevelius, Morin, Halley, Gregory, Newton, Herschel, the Dollonds, Fraunhofer, and others contributing to the improvement of the telescope, and to the stock of astronomical knowledge.

The past hundred years has witnessed a great development in the various departments of this grand science, the discovery of the spec-

troscope being a notable feature in promoting our knowledge of the nature and movements of the stars and planets. The construction of the telescope is based upon the well-known property of a convex lens or concave mirror to converge to a focus or point the rays of light falling upon it from any object, and to form an image of the object at the focus. A second lens of shorter focus, and, therefore, of higher magnifying power, is placed near the image thus formed, and the effect is a greater increase of the apparent size of the object. The simplest form of telescope is an arrangement such as the above of two convex lenses. In the reflecting telescope the concave mirror placed near the bottom of the tube receives the rays from the object observed. In the refracting telescope, termed refracting from the effect of the composite object-glass in refracting the rays received upon its surface, the object-glass is convex. Allusion has been made in the course of the article to the manufacture of a telescope objective, the most important component in this remarkable scientific agent.

Equatorial telescopes are so called from the usual apparatus which adjusts them for the observer's convenience in studying the heavens. This apparatus consists of mechanism which gives the telescope two axes of motion, one being parallel to the axis of the earth, and the other being at right angles to that.

ALEXANDER M. ROSS, M.D.

DR. ROSS has a plump, solid, enduring, healthy, and vigorous organization. We judge that he inherits many feminine qualities of character directly from his mother, or his grandmother on his father's side; and those qualities serve to give him excellent digestive power and vital endurance not only, but also that intuitive sense of truth, and that delicacy of criticism, which more frequently come from the mother's side than from the father's.

He has a twenty-three and a half inch brain, and body enough to give it support; and he can do a great deal of hard work with that brain. If he were a lawyer, with all the knowledge and experience of a lawyer in full practice, he could take one side of a heavy case, with three or four well-paid opponents, and they might snarl at him six

days in the week, and on Saturday night he would be able to sum up the case in a three hours' speech with full vigor and elasticity; while a man with a small stomach, small chest, and weak vitality would get worn out by that time, and wish to adjourn the case until he had taken rest.

He has the stock in him to do a great deal of work, whether of head or of hand, and knows little of weariness or fatigue. If it were required that he should work eighteen hours a day for six months in succession, it would disturb and injure him less than it would ninety-nine men in a hundred. His excellent vital system feeds every fiber of the organization as much as it needs; for he can digest anything, and make it into steam for life's work.

He has a wide head, hence he has force

and thoroughness. He is not quarrelsome, but has a high temper when thoroughly aroused. His Combativeness is not sufficient to make him readily enter the lists of conflict, but when duty calls he braces himself up to the work, and is very effective. He has much independence of spirit rather than lordliness. He has ambition to rank well, and would suffer deeply if traduced or disgraced.

His love for friends and family, and especially for wife, is very strong. He is popular

people, but when making money he understands the value of it, and is willing to earn it.

His large Constructiveness would have made him a good manager of machinery and mechanical matters, and he would be very skillful in the use of tools. His large Acquisitiveness qualifies him for finance. He would handle large affairs, such as of railroad, banking, or manufacturing interests. He could manage large bodies of men, and be master of the situation.



with children, and fond of pets; is one of the friendly kind of men, who do not have to seek, in order to have friends. Returning home after an absence, everybody is inclined to shake hands with him. He feels at home in the midst of his friends, rich and poor. There is not so much aristocracy about him as to make the poor look upon him with doubt and uncertainty. If they want a favor, they ask for it; and if he can not grant it he makes them feel that he would if it were in his power. He is more generous than most

He would have done well as a public speaker; his language has grip, and generally fits the subject. He is an intuitive man; reads strangers at a glance; his impressions of those he meets rarely need modifying; experience sanctions and corroborates them. His quick and clear observation enables him to gather knowledge, and he remembers everything he learns; and, with his vigorous body to sustain his large and active brain, he doubtless will make his mark wherever he puts forth effort.

ALEXANDER MILTON ROSS was born on the 13th of December, 1832, in the town of Belleville, Canada. His parents were descendants of Scotch Highlanders, who came to Canada in the same year that Quebec surrendered to General Wolfe. He showed a great fondness for the study of natural history at an early age. Every spare hour of his boyhood was devoted to the practical observation of the habits of birds and insects, and great was his delight when he had discovered what was to him a new species, or witnessed some new characteristic. When but ten years of age his knowledge of the various species of birds, their plumage, song, and habits, was a matter of surprise to older and more experienced naturalists. His attention, even at this early age, was drawn to the errors into which many ornithologists of note had fallen with respect to the plumage of birds—especially the birds of prey—not only during the first three years of their lives, but also at different seasons of the year. His close and careful observation in this respect had satisfied him that birds of the same species differed very widely at different seasons and at different periods of life, in consequence of which many authors on ornithology had been led into errors of classification and nomenclature. Dr. Ross' self-reliance and habit of judging for himself after practical and careful observation of animated nature in its various aspects, has given to his conclusions a high character for accuracy.

Dr. Ross is in every sense of the word a self-made man. The high position and reputation he has won as a naturalist and author have been the result of hard work, patient observation, and life-long labor in the great and deeply interesting field of nature. His investigations have not been confined to any particular section of natural science, but has comprehended a wide domain. The extent of his labors may be inferred from his own statement that he has individually collected a male and female specimen of every bird, both native and migratory, known to visit the several provinces that now compose the Dominion of Canada, and numbering in all three hundred and twenty-three distinctly different species; and he has obtained also the eggs of each species that breeds in Canada. His observations have also been direct-

ed to the materials of which the nests of each species are composed, and the style of architecture and position for building peculiar to each species.

In the department of entomology his labors have also been equally severe, and his investigations have resulted in the accumulation of much knowledge concerning the habits and food of caterpillars, their transformation and life as winged insects, which knowledge has proved of incalculable benefit to the horticulturist and agriculturist. His collections of insects are considered by American and European entomologists as the largest and most complete ever made by one individual, and number over ten thousand species, a large number of which he has identified as injurious to vegetation.

In the field of paleontology Dr. Ross has also done good work. His collection of fossil plants is very rare, and includes some beautiful and long since extinct varieties of ferns, etc. He has also won distinction as a botanist. His botanical collection comprises six hundred and twenty varieties of flowering plants, all of which have been collected in the Dominion of Canada.

In 1871 Dr. Ross published his first work, the "Birds of Canada," the fruit of many years of severe labor and investigation. The first edition was speedily exhausted, and a second and a third edition met with a speedy sale. On the appearance of this work in Europe it met with the appreciation of the most distinguished *savants* in every country, and the author was made the recipient of scientific honors from the learned societies of England, France, Russia, Germany, Belgium, Italy, Spain, and Switzerland.

In 1872 Dr. Ross published his "Butterflies and Moths of Canada," a very interesting and valuable work upon a subject never before attempted in Canada. This work met with a like favorable reception both at home and abroad. Our subject is also the author of several valuable and interesting papers on natural history subjects, among which may be mentioned the "Ferns and Wild Flowers of Canada," the "Flora of Canada," the "Forest Trees of Canada," etc., all of which have been received with very high testimonials of appreciation by naturalists in America and elsewhere.

Dr. Ross was a true and active friend to this country during our late civil war. He deeply sympathized with the efforts made to free the land from the blight of human slavery; and his endeavors to create in Canada a kindly feeling toward us, elicited from President Lincoln, John G. Whittier, Wendell Phillips, Secretary Seward, Horace Greeley, Gerrit Smith, and Charles Sumner letters of the warmest thanks.

He is still a comparatively young man, and capable of performing much labor in his favorite field of study. He is now engaged in collecting the mammals, reptiles, and fishes of his native country. This great work will require many years of hard work, patient observation, and close study, for Dr. Ross is not the man to accept the opinions of others; he must see and judge for himself. Notwithstanding the severe and exhausting labors he has undergone, he enjoys excellent health, his habits are regular, his diet plain and unstimulating. He never has used tobacco or alcoholic liquor of any description. If his life is spared he is quite sure to accomplish the great work he has marked out for himself.

WAGNER AS A COMPOSER.

HAVING noticed in several newspapers of a recent date some erroneous assertions concerning Richard Wagner and his "music of the future," I solicit this opportunity to interpose a few corrections.

The first misstatement to be disproved is, that Wagner was poor and friendless; that he has fought the world's prejudice single-handed; and that he has acquired his present important position in art merely through his own endeavors. The fact is, that in youth Wagner received an excellent education, with many advantages for studying art and science. He was also permitted to enter the precincts of good, substantial society, and in this way formed many friendships which were afterward of great service to him. It is quite true that his first visit to Paris was unsuccessful; but he was then a mere novice, and certainly he can forgive the Parisians their want of appreciation for his singular strains after having administered to them so many pages of caustic epithets. Soon after this the renowned Franz Liszt began to manifest his friendship for the young Leipzig composer. The venerable abbé,

who had already begun to dream that the power of music was something more than suggestive, at once entered into the plans of Herr Wagner, and of course agreed with him that the opera had been perverted. The benefits which Wagner received from this great and influential man were immense. In fact, it is doubtful who contributed most to the celebrity of Wagner, himself or his "father-in-law," Liszt. One other circumstance which added to the notoriety of the author of *Tannhauser* and *Lohengrin* was the publication of his portrait and revolutionary proclivities in the official *Police Gazette* of his native country, with a reward for his detection. These facts seem amply sufficient to show that Herr Wagner was far from being an "unfortunate young man," and that men and circumstances have both combined to render his name celebrated.

Now with regard to his musical theories. It is claimed that he is a reformer; that he has corrected many abuses in dramatic music, etc. Yet the very innovations which he lays down as his were published as a preface to the later operas of Gluck, that composer having set down those principles quite plainly nearly a century anterior to the proclamation of Mr. Wagner. In addition to this, he ungenerously ignores the fact that several of the most consummate masters in musical art have composed operas so excellent that the world has not yet learned to appreciate them fully, and their authors have taken care that none of the errors of which Wagner complains might be found in their scores. What critic is there so erudite as to be unsatisfied with the dramatic music of Gluck, Spontini, Mozart, Beethoven, Von Weber, or even Meyerbeer and Gounod?

If Mr. Wagner finds the opera in a degraded condition in some German or Italian town, he does well to elevate and improve it. But let him not ignore the illustrious names above mentioned, from whose works he has derived a large percentage of his musical effects.

That Wagner is a mountebank or an ignoramus, no fair-minded critic will allow. Nor will such a critic proceed to the other extreme, as is customary, and claim that the author of *Lohengrin* is a pre-eminently great man. In proof of this, and in conclusion, I will venture the remark that many of Wagner's best melodies have been surreptitiously appropriated from the compositions of others, and that he has not written an harmonic progression, a cadence, or a contrapuntal form which can not be found in the works of Beethoven. The avoided cadences which he uses so much were

invented by Beethoven, and perfected by Schubert and Schumann. In fact, his originality consists in such oddities as re-scoring the choral symphony, writing an opera which will require four days for its performance, and continually giving to the trumpets and trombones what belongs to the clarionets and bassoons.

A. J. GOODRICH.

HINTS ON PRIVATE READING.

CONSIDERATIONS of economy are being demanded in every department of usefulness in American society. Nor is it money alone that is to be saved, but time and strength come into the category of things to be most consistently expended. The practical value of this remark is deeply felt by many hard-worked people — farmers, housekeepers, and mechanics—who wisely esteem the cultivation of their practical intelligence of equal value with the diligent labor of the hands. How shall these, possibly privileged to an hour or two each day which they may individually call their own, accomplish the inexhaustible amount of reading matter that might profitably engage their attention? In the first place, there are two principal objects to be secured in reading. One is to be simply entertained by the style of the composition or to cultivate the emotions excited by the perused article or work. All people love more or less to cultivate this object, and reading to this end can not be hurried. It requires the closest application to the entire text to get its full import, and one can hardly save much time in its perusal. Hence many of our most practical people, and especially those in search of popular scientific information, abandon this kind of reading almost or quite wholly.

I have already partly anticipated the second principal object of reading, namely, information. It is in view of this that I offer my main suggestions. That there is a way to gain practical information from books and papers, and gain it rapidly, is a point it would seem very many have failed to consider—so often is it said, “I can’t find time to read the books and papers I already have.” Yet these same people have been cultivating reading habits more or less for years, and have never learned a fact that everywhere becomes patent to good workmen of all trades—that experience is designed to make one facile, both in the saving of time and the better accomplishment of the art in practice. Ask any first-class artisan

who has followed his trade for some years, if it is necessary for him to take as many steps in the details of a job as when he first begun to lift and apply tools—just as unnecessary is it that one should do as much detailed work in reading a book or newspaper after he has had a little good practice.

In our common schools children are now beginning to be taught to read by the “word method.” It is conceived by some that it is just as easy for a child to recognize the identity of the word *boy* as the individual appearance of the letter *A*. Why not? In the light of the same reasoning I propose that those pressed for time learn to read by the *line method*, or the *paragraph method*, which they can do easily. I have practiced a condensed style of reading more or less for some years, compelled to it at first by causes similar to those of which others complain. I now read a book in less hours than it would have once required days, and my newspaper in at least as few minutes as it would once have required hours.

There is another point of profitable consideration in this connection. Few persons possess what we may call microcosmical minds. It is not given to many of us to know, as it were, everything that is said and done in this wide world. But most every one is adapted to the more ready accumulation of a certain class of valuable facts. These he should first seek for, learning to skip the matters with which he has practically less to do. I have heard of a man who devours his newspaper solidly, advertisements and all, and his practice only more completely illustrates the habit of a too large class who utterly fail to make a most judicious disposal of the short time spared for reading.

Now I come to a matter of paramount importance to every one who appreciates knowledge. A person who feels himself unable to buy books, and who takes a paper or two, can easily make a splendid volume with apparently the least effort. I will explain by describing a plan I have myself adopted. Like many others, I almost never save a newspaper. However, I generally read with a pencil in hand to mark the particular instructive and entertaining articles or passages. These are afterward cut out, classified, and put away. In this way I am establishing a nice growing *repertoire* of reading, not a line of which is of an indifferent character. The scraps are at present inclosed in large-sized envelopes, each of which is marked on the outside in indication of the contents. Thus I have an envelope marked *Philosophical*, another *Agricultural*, and still others,

Botanical, Chemical, Physiological, Poetical, Humorous, etc. Thus I am creating, as it were, a little private encyclopædia, to which additions are made every week, and in fact almost every day. There is included in this, however, a similar collection of copied items and passages from different books, particularly from such as I have taken from our local library, and of course can not retain. These are all folded, marked, and classified like the others.

There is one particular advantage in preserving scraps in envelopes instead of pasting

them in book form. It gives opportunity for re-arrangement and improved classification. In constantly accumulating and varied matter, there will be occasional demand for instituting new departments, both to facilitate ease in referring to any one and to prevent an undesirable bulkiness. Especially is this the best plan for one who may be called to address a public audience; a single scrap is less awkward to be taken into an auditorium than a book; or if one would otherwise copy, it saves that labor.

C. C. LORD.



NEW YORK, SEPTEMBER, 1874.

IN TIME TO COME.

IN this year of our Lord, 1874, we who live in cities light our houses with gas. How will it be in 1974? Shall we not then use electricity instead? We now propel our machinery by steam; may this not also be done by electricity? We now communicate through the electric telegraph; may we not attain a state of higher mental and spiritual development, so as to read even the very thoughts of others, though at any distance, as by dreams, or by clairvoyance? May not man come into closer *rapprochement* with the Divine mind, so as to know and do His will better? May he not become a seer? Is the power of prophesy totally withdrawn from man? Whence this desire, this yearning to become one with God?

"It has been beautifully said that 'the soul's yearnings are prophecies of what the soul is to be;' which may be interpreted that the character of the soul's yearnings are representative of the character of the soul; as one who, from the motives of self-love, yearns for the external advantages of riches and influence and power, would study out the

measures to secure these; and one who yearned, not for the appearance, but for the reality; not for the shell, but for the kernel of true riches and honors, goodness and truth, would be careful to take measures to secure these; and the acquisition of what the soul has thus earnestly yearned after will uniformly afford it opportunity for manifesting itself in its true character. But, in minor matters, are our yearnings ever prophecies, presentiments of what we are about to receive? For the present I will yield myself to the enjoyment thus to believe."

The faculty of Constructiveness is active in the inventor, the engineer, and in the architect. Causality, Comparison, and the perceptive faculties are active in the chemist, the astronomer, geologist, phrenologist and other scientists, while the moral sentiments induce the student in theology to look into psychology, and to discover what he may relative to the beyond—even as to "kingdom come." God gave man a body and a brain. At first he is simply an infant—helpless and dependent. But he grows. If educated, he may rise to eminence. He may even surpass both parents and teachers in knowledge. Who shall draw lines of limitation to the reach of a fully-developed human mind? Who can say to this creature, made in the image of God, to whom was given "dominion over nature:" "Thus far, and no farther"? No one can say what may not be possible for God to accomplish through man. Who can predict what will be the condition of things on earth in a thousand years from now? The human body grows; the human mind expands. One may know more than another. One believes more than another—has more faith; is more gifted. One is ~~later~~ generated

—better born than another; is out of better stock; has more health, powers of endurance; lives on a higher plane; is “nearer God.”

It is a comfort to know that man—even the very best—may still further improve; and so of the worst. No one has yet reached the top round in the ladder of human perfection. Each may climb a little higher, and become a little better—much less selfish, and much more godlike. “In time to come,” man shall have emerged from the lusts of the flesh. His passions shall be subordinate to his intellect, and intellect to his moral sense. He will become less and less avaricious, and more and more charitable. He will live in strict accordance with the divine commandments; will obey the laws of life and health; will do as he would be done by; and find it every way “more blessed to give than to receive” favors, service, etc. Happiness being the end and aim of existence—and not sin and suffering—we hope, in time to come, to “enter into the joys of the Lord.” It is written: “Eye hath not seen, nor ear heard, neither have entered into the heart of man, THE THINGS WHICH GOD HATH PREPARED FOR THEM THAT LOVE HIM. But God hath revealed them unto us by his Spirit; for the Spirit searcheth all things. Now we have received the Spirit, which is of God, that we might know; he that is spiritual judgeth all things, yet he himself is judged of no man.”

It is clearly intended that man may develop into a being superior to any that now inhabit the earth. Why not put ourselves in training, under the Divine Teacher? Are we not commanded to be perfect?

WHAT PHRENOLOGY HAS TO CARRY.

UNDER good apple-trees there are to be found a plenty of clubs. Eagles in voracious greediness gather around a carcass. Phrenology has had to bear its share of burdens. Selfish, ignorant men have adopted it because of the fruit they could club from its branches. Mere adventurers have taken it up as a temporary means of support, and these unqualified and mercenary men have, in scores of instances, disgraced the science

by their unsatisfactory administration of it. A want of information respecting the subject, even though the man be honest, and in all respects unexceptionable in his character and conduct, will disgust intelligent observers with him and his subject, and build up a wall of prejudice against all who may come after him, and it takes a world of hard work, or the time of a generation, to remove the prejudice and place the science on a good footing.

To be a practical phrenologist, one should be honest and respectable; he should have education enough to satisfy public expectation, and last, not least, he should understand the subject. He should at least have large acquaintance with the subject by reading and observation, and, if possible, through training and culture under those who know how to teach the science. Some men think it is easy to slide into the field to teach and practice Phrenology, as the following letter just received will show:

MR. EDITOR — *Sir*: I wish to practice Phrenology; I have studied it considerably for several years, but I do not think I could make a success of it without more information, and I send to you for advice, etc.

What I wish to do is to deliver lectures and practice the science, thereby making it profitable as well as instructive. I wish you to send me some good lectures on the science—something adapted to a lively, prosperous town. In short, I want a *full equipment*, so that I may thoroughly acquaint myself with the style I should adopt. Send me as soon as you possibly can the things you think I will need to begin practicing, lecturing, etc. My qualifications are good every other way, having a college education, except in Phrenology and Physiognomy. As I don't know how much to send you, I request you to send the package to ——— by express, marked C. O. D., the amount not to exceed \$10. Please send as soon as you possibly can, as I wish to begin lecturing at once.” ———

Is it strange the public complain that some who attempt to practice phrenology are superficial quacks, when a well-meaning and well-educated man expects practical instruction, lectures, and an outfit inside of \$10?

His college education is a first-rate beginning; but in order to do the subject justice, one should not only have read the leading works, studied the bust, practiced as an amateur, so as to be familiar with practical Phrenology, or else he should have been

thoroughly trained in a course of instruction as to the theory and practice of the science.

When men knowing almost nothing of the subject shall stay out of the field, and those who are by nature and education qualified to learn and practice Phrenology, shall obtain thorough instruction and go out well qualified to deserve respect and success, the science will be cordially received, and its worthy advocates amply sustained and honored.

THE WORLD'S TELESCOPES.

IN another column will be found an interesting account of the different telescopes in use in various parts of the world. If some clever person would invent a glass which would enable the people to judge a politician's character when he looms up in the field of politics, as well as those wonderful instruments enable us to learn the character and movements of the heavenly bodies, it would be of inestimable advantage to the citizens of this happy Republic.—*New York Herald*.

WE also give, in another place, an article on telescopes, which will be found to be somewhat interesting.

As to a glass by which to "judge a politician's character," we beg to suggest that it may be found in Phrenology, Physiology, Physiognomy, and Psychology. A careful inspection of one's head, body, face, and aura, will disclose the real state of things. There is no more mystery about this than there would be for an expert to judge a clock or a watch, and to determine its qualities as a timekeeper. One who is skilled in judging wool or fur can sort out the coarse from the fine, even with his eyes closed. A worker in iron, wood, marble, granite, leather, cloth, or other materials, can tell at a glance which is the coarse, the fine, the brittle, or the tough. A skilled physician can diagnose an ordinary case of sickness almost instantly. An experienced editor can judge, by the first few sentences, whether or not a communication is up to the usual standard of excellence, or whether he must decline it. A poet can judge poetry. A musician can judge whether a new composition is worth publishing. In prospecting for gold or silver, one who can read the surface indications knows what to expect; and a mineralogist knows the difference between the real metal and shining pyrites. So it is, all through nature, art, and science. Why not in character-reading? It is claimed that Phrenology has been reduced to method,

system, science. This, then, is the glass through which to read a politician's character. Aye; put a lot of our late congressmen into a bag, shake them up, blindfold a good Phrenologist, and permit him to sort them out and describe their characters without seeing them, and he will give to each the character he deserves, from U. S. G. to B. F. B.; and this would be such an impartial "investigation" as would open the eyes of the people to the sort of law-makers, and law-breakers, they in their ignorance send to Washington!

But, aside from these scientific rules by which to judge "who is who," any one, blessed with ordinary common sense, ought to be able to judge the man he chooses to intrust with legislative duties and the defense of his liberties. Is the man honest? Is he trusted by his neighbors? Does his record show that he seeks the public good, rather than to fleece the public? Is he a clean, temperate, religious, self-denying, godly man? or is he intemperate, profane, lecherous—reeking with whiskey and tobacco? How can you expect anything but disgrace from *such* a representative? Do you want a telescope to discover *his* character?

When people come to recognize the teachings of Christianity and Phrenology, they will be more careful whom they send to represent them in places of honor and of trust.

A NEW RELIGIOUS MANIFESTO.

THERE is progress in the world. Put an iron ring around a growing young tree, and the tree will burst the band or the band will kill the tree. The human mind grows, enlarges, expands by what it feeds on—learns—and so bursts the bands of narrow, man-made creeds, or the creed cramps and dwarfs the mind, holding it in mental slavery to antiquated superstitions, and to old, hide-bound doctrines, which keep growing minds in a state of constraint and irritation. What is wanted is religious freedom, complete emancipation from mental thralldom or slavish priestcraft. In this connection we publish the following, which comes from the South, as an evidence of religious progress. Readers will have their own opinions as to

this and all other matters which the JOURNAL brings to them:

CIRCULAR ADDRESS OF THE GENERAL CHRISTIAN CONVENTION.—TO THE LOVERS OF CHRISTIAN UNION EVERYWHERE!—The General Convention of the Christian Church held its fourth quadrennial session at Graham, North Carolina, beginning on the first day of May, 1874. A Special Committee, consisting of Rev. J. T. Whitley, Rev. John N. Manning, and Brother John M. Moring, was appointed to consider and report upon the general subject of Christian Union. The Committee, after mature deliberation, presented a report, recommending the adoption and extensive circulation of a Manifesto, setting forth our views and aims as an organization. The report was unanimously adopted, and the following is the

MANIFESTO.

The General Convention of the Christian Church, assembled in quadrennial session this 6th day of May, 1874, hereby declares:

I. It is the steadfast belief of this body that Christ established but *one* Church, designing that all his followers, as members of that one body, should harmoniously work together for the salvation of the world. We are of the opinion that the present division of the Church into sects, and the attitude of these sects toward each other, are offensive to God, detract from the glory of the Saviour, and impede the reformation of the world.

II. It is our belief that entire unanimity of opinion upon matters of theological doctrine and ecclesiastical polity is unattainable, so long as "we see through a glass darkly;" but that a unity of love, forbearance, and co-operation is fully within the reach of all true Christians.

III. We hail with joy the wide-spread and increasing desire among God's people to come into a closer relationship with one another, manifested in such meetings as those of the Evangelical Alliance, and represented by many periodicals of the day. It pleases us to know that churches are springing into existence in various localities, composed of Christians who are tired of sectarian intolerance, and desire to manifest their essential unity; and that "doubtful disputations" are sinking into disuse, while the great points of faith, common to all Christians, are rising into due prominence.

IV. As an organization, it is the chief object of the Church we represent to bring together all true Christians upon a platform of mutual forbearance, common sympathies, and fraternal love. We therefore offer the hand of fraternal greeting to all true followers of our blessed Redeemer, assuring them of our profound interest in their welfare, and soliciting their kindly sympathies and prayers. Holding these views and aims, we hereby declare our desire to co-operate with any and all those who love our Lord Jesus Christ, in performing the great work which He has assigned His Church. We have formed an organization merely to make

our labors more effective; and we are ready to form a corporate union with any body of Christians upon the basis of those great doctrines which underlie the religion of Christ. Clinging only to those fundamental truths, without which Christianity could not exist, we are ready to submit all minor matters to the decision of the individual conscience.

V. We suggest that something like the following be adopted as a

BASIS OF UNION.

1. BELIEF—(1) In God, as our Creator and Law-giver.
- (2) In Christ, as our Divine Mediator and Redeemer.
- (3) In the Holy Spirit, as our Comforter and Sanctifier.
- (4) In the Bible as inspired by God, and the supreme standard of appeal in all matters of religion.
- (5) In the sinfulness and lost condition of man.
- (6) In the doctrine that salvation is a free gift of God, through Christ, and can be received and enjoyed only by faith.
- (7) That love to God and men is the whole duty of man.
- (8) That those who accept and obey the Gospel in this world will be happy in the world to come; while those who reject the Gospel in this life will be miserable.

2. The right to hold and express opinions not conflicting with the above articles of belief is freely conceded to each individual member of the Church.

3. Nothing more ought to be demanded as a prerequisite to admission into the Church than a credible profession of "repentance toward God, and faith in our Lord Jesus Christ."

4. The body should be called by some name sanctioned by Scripture usage; either Christian Church, Church of Christ, or some other equally significant and appropriate.

VI. With a view to forming and cultivating fraternal relationships with all Christians who are like-minded with ourselves, we hereby invite correspondence from individual Christians, independent local Churches, and other religious organizations. The President of the General Convention, or the Secretary of the same, whose names and addresses are given below, will gladly answer all inquiries, and give whatever information may be required.

May the God of all grace direct his people into a closer, more perfect unity, that the Saviour may be glorified and the world regenerated. Signed by order of the convention. W. B. WELLONS, President; C. A. APPLE, Secretary.

Officers of the General Convention: President, Rev. W. B. Wellons, Suffolk, Va.; Vice-President, Rev. Solomon Apple, Milton, N. C.; Secretary, Rev. C. A. Apple, Holy Neck, Nansemond Co.,

Va.; Treasurer, Alfred Moring, Esq., Morrisville, N. C.

[Let the work of reorganization and of regeneration go on. Drop all quibbles, and keep to the spirit rather than the letter, of the law. Let us glorify God by doing His will, which is the true means of attaining the fullest stature of a man physically, socially, intellectually, and religiously. May God bless all efforts in this direction.]

PARTNERSHIP AMONG FACULTIES.

MR. EDITOR—Supposing the science of Phrenology to be true, as set forth, it seems to me that the entire brain at times partakes of the nature of some particular organ or element of the soul. To explain: Occasionally, and for a considerable length of time, the thoughts seem to be concerning Music, and nothing else; at another time it is Constructiveness; at another Spirituality, etc. Can it be that the organs of the brain are, as it were, in a circle, beginning at one, and, taking each in order, each in its turn, making the entire soul partake of its nature?

O. C.

Response.—If our correspondent had read an article in the January number, 1873, entitled "Coördination of Faculties," or a series of articles in 1872, entitled "How Different Faculties Combine," he would have had an answer to his question, or proposition. If we take the simplest process of physical effort, namely, walking, we find that the whole system coöperates. The eye gives information as to the road and its surroundings; Cautiousness looks out for danger or trouble; the lungs increase their labor; the heart promotes circulation more freely; digestion gets a new stimulus, and every motion that is made in the process of walking awakens the elements of repair, assimilation, and nutrition. It is known that every revolution of the steam-engine exhausts steam. We hear the high-pressure steamer go puff, puff, over its route, and in the animal economy the same exhaustion of vitality is going on at every step. If this law of coöperation is true in respect to all the functions of the body, it furnishes an illustration of the law of mental coöperation. The intellect is the general guide and servant of all the faculties,

while they act as stimuli in thought, desire, and aspiration. It is possible for a faculty to act without any coöperation, just as it is possible for the eye to act without inviting the service of the ear. But we can hear, see, taste, smell, and feel in coöperation sometimes. We hear the fall of an apple, we smell its fragrance, we taste its luscious juice, we see it, and feel it, and thus each of the external senses furnish information and heighten the pleasure of the repast.

If Constructiveness be excited, the faculty of Individuality notes the parts, things, and processes; Form is awakened to judge of outline and shape; Size to measure and determine magnitude; Weight to regulate the efforts or blows; in fact, the whole intellect is called upon to work with Constructiveness, but that faculty is the leader of all, for construction is the object. A man with just such a shaped head as his, except in Constructiveness, would not be impelled to use the building faculties, consequently would not arouse the intellectual faculties to carry out the purpose of building. Music may be the chief factor, for it may excite every muscle of the body to play the violin or to dance; it may excite Ideality, Hope, Fear, or Love; but a man without musical talent would not have such impulse to act. Persons who are not at all musical laugh at the dancers and the musicians just as we would if a person were to put a lot of scrap iron into a tin pail and shake it, and others were to dance by the noise.

So the organs of the external senses, and the organs of the body, all the vital organs as well as mental, may work together with increased power and compass, or they may work to a great extent separately. "We are fearfully and wonderfully made," and it is sometimes a marvel that a harp of so many "strings should keep in tune so long." Let us study reverently the mysteries of human nature, and try to employ our powers in harmony with the Creator's design.

THE ANNUAL FOR 1875.

WE have the new ILLUSTRATED ANNUAL OF PHRENOLOGY AND PHYSIOGNOMY for 1875 well under way. It will be out early in the fall, and for sale by agents and

newsmen everywhere. THE ANNUAL for the present year, 1874, is conceded to be the best ever before published, and is still selling. That for 1875 shall be as good, if not better, and the price will be the same, only 25 cents. Those who order in advance, by the hundred or by the thousand, will be served in advance of the regular date for publication; others will be supplied in the order of their receipt at this office by the publisher.

"DON'T MARRY A MAN IF HE DRINKS."

WE beg to amend, or, rather, add to the above the following, "DON'T VOTE FOR A MAN IF HE DRINKS." The majority of voters in this country are in favor of temperance. If we add the women—who ought to vote, and who are as much concerned as the men in the question, and in human welfare—there would be an overwhelming majority in favor of temperance. Religious people, generally, are for temperance; so are nearly all good citizens,

and when an election for town, county, state, or national officers takes place, why not give the preference to men who don't drink? We regard this as simple *duty* as well as common sense. Suppose all the clergymen in America were to say to their congregations that it would be well for each citizen to attend the primary meetings, and to exert his influence in favor of temperance men for offices of trust, rather than drinking partisan politicians, and if each citizen would act on this suggestion, it would not be long before we should have better officers than those who now disgrace our country by their drunkenness and their crimes. We do not propose to discriminate against nationalities in the choice of officers, but against rum. It may be as well, however, to elect Americans, when they may be found equally capable, as to fill our offices with foreigners. But, first of all, we want *only* temperance men. Let us get ready for the next presidential election, and put up temperance candidates.

AGRICULTURAL HINTS.

Cherry Trees Sunstruck and DESTROYED.—The present heated term has produced at least one phenomenon in this vicinity which will "astonish the natives" who may hear of it, and perhaps open up a new field of investigation for scientists and men of inquiring dispositions. Instances of persons being sunstruck, with serious and sometimes fatal results, have occurred quite frequently of late, as is generally the case during a severe hot spell; but never until last Sunday has there been, we believe, such a thing reported as a case of *sunstroke upon trees*.

Mr. Adolph Vieser, who resides in the town of Lake View, just north of Chicago, and near the lake shore, has on his premises several fine large cherry trees. Two of the largest and best of these trees stood at one end of the garden, very near to a high board fence. Both of them were very thrifty, were covered with green leaves, and bore a bountiful crop of cherries, which were nearly ripe. About three o'clock, last Sunday afternoon, Mr. Vieser was standing for a moment near those trees, when suddenly he heard a strange noise, as if caused by the splitting of wood or bark above his head. Looking upward, he witnessed the most astounding freak of nature he had ever met

with. The bark covering those trees began to peel off at the top, curling downward along the trunk and limbs until it reached the ground, and leaving the trees as naked and barren as though they had been riven by the lightning's bolt. Barks, leaves, and cherries were all stripped off, and laid a promiscuous mass of ruins upon the parched earth surrounding the desolate trunks. The process occupied but three or four seconds, and as soon as he could recover from his astonishment, Mr. Vieser made a thorough examination of the trees. The ruin was complete. He found the trunks, limbs, twigs, leaves, and fruit perfectly dead. They had literally *died of sunstroke*.

It will be remembered that last Sunday was one of the hottest days of the season thus far in this vicinity. There was a lively breeze all day, but the rays of the sun were unusually severe. Of course the fact that the unfortunate trees were standing so near a high, tight fence, from which the sun's rays reflected directly upon them, added several degrees to the severity of the heat; and yet, such a result as was witnessed by the owner is certainly one of the most curious and interesting phenomena of the season.—*Chicago Journal*, July 1.

[Had the roots of those trees been protected

by a thick mulch of straw, grass, spent tan bark, or other substance, which would have kept the temperature down to a moderate degree, the trees would not have been thus "roasted alive." It is not unusual for young trees to drop their unripe fruit, and even their foliage, in midsummer, owing to the ground and roots becoming parched and over-heated. Many young trees die every year from this cause. A good mulch to protect the roots from the sun's rays, and to keep the ground moist during the "heated term," would save the trees.]

Flax in Nebraska.—It is believed that the soil and climate of this young State is admirably adapted to the perfection of this useful plant. Why not hemp also? Half a bushel of flax-seed to the acre would produce from ten to twenty bushels, worth \$1.50 per bushel. Taking the yield at ten bushels, the seed is worth \$15 per acre, and allowing \$8 per acre for expenses (which included the delivery of the seed to the mill), the net profit to the farmer would be \$7 per acre. The straw also is worth \$6 per ton; and the yield is half a ton to the acre. Oil mills would be established. The fiber would be manufactured, much of it at home, and a new and profitable industry be established. Something besides pork, beef, corn, and wheat must be raised in our Western States, if they would acquire independence.

Managing Small Fruits.—A writer in an exchange says: "If the currants are more than a year old, cut the tops all off close to the roots. With grapes, if the top is of the previous year's growth and has buds near the roots, leave one or two. If not of last year's growth, cut it all away. The top of raspberries should be all removed. Then, when the roots get their machinery at work, they will send up canes that will fruit well the next season. But if the top is left on it will require all the energy of the roots to support it, and if the plant does not die the first winter it will be feeble and sickly the next summer, and linger along year after year until the planter condemns the variety and throws them away in disgust. Last spring I filled an order for raspberries, and before sending them I cut the tops back to two feet and came near having them returned for doing so. I told the dealer that they should all be cut off when planted out. He said that he knew that very well, but his customers did not; they would have plants that would bear the first year, and it was the top that sold them, not the roots. But my ad-

vice is, see that you get good roots without any regard to tops.

Washing Sheep.—A farmer of Porter, Mich., asks the *Inter-Ocean* as follows: (1) Does it injure sheep to wash them, and (2) would it be more profitable to clip the wool without washing?

REPLY.—The first question we answer unqualifiedly, yes. The washing of sheep is not only an injury to the animal, but is cruel, inhuman, and uncalled for. In the first place, it matters little how carefully the sheep may be driven to the place where they are to be washed, they become heated, and their heavy fleeces keep them in a condition that renders it a positive injury to plunge them into cold water, and produces a reaction in the system that must make itself felt to the injury of the animal. Again, after washing sheep it is impossible to dry them, and they are compelled to carry their fleeces soaked with from ten to twenty pounds of water, which will require at least a week for its perfect evaporation. What farmer, who believes in this barbarous practice, would feel willing to wear a suit of wet clothes constantly for a week, and at night lie down in a wet bed? Would he wonder if, at the end of the time, he had a tolerably well-developed case of rheumatism or the ague? And, in fact, the practice is also a dangerous one to the person who performs it. Besides many sheep are killed by the rough handling they receive from unskillful men. This practice of washing sheep, however, is discountenanced by the most intelligent breeders and wool-growers, and it should long ago have become obsolete. (2.) It *ought* to be more profitable to clip wool unwashed, but in some portion of the country is not so, if we leave out of the question the damage to the flock. The Eastern manufacturers prefer to purchase unwashed wool at a slight discount. This question of purchasing unwashed wool was thoroughly discussed at a convention of the National Association of Wool Manufacturers, held at Syracuse, N. Y., in 1865, in which the representative wool manufacturers took the ground in favor of the unwashed fleece, because there was no uniformity in the washing, rendering it impossible to fix a fair percentage of discount between the washed and the unwashed fleece, and also because the unwashed wool kept and worked better. The rule of discounting unwashed wool is not insisted upon by the manufacturer, and that profit goes to the middleman's pocket. If a manufacturer buys a quantity of unwashed wool,

its price is fixed by its quality and merits, without reference to what it would be if it was washed. If, however, a single lot of wool contains both washed and unwashed fleeces, then a basis of discount is necessary. It happens frequently that a commission man will buy two lots of wool of two neighbors, one lot being washed and the other unwashed—the washed lot brings a certain price and the other is discounted, and yet the unwashed moiety may bring the higher price per pound at the Eastern market. This is one of the tricks of the wool trade. So far as dollars and cents are concerned, if one is dealing with commission men, it is probably more profitable to about half wash the sheep; but if one raises a good quality of wool and deal directly with the manufacturer, or his agent, it is more profitable to clip the wool without washing.

[A few words as to shearing. Let it be done by a kind and careful hand, so as not to cut the tender skin. We have seen poor, defenseless sheep cruelly marred, their skins being cut in many places clear into the flesh. There is no need of this—a careful hand will remove the fleece without drawing a drop of blood.]

SOME IMPORTANT EVENTS WHICH OCCURRED IN THE MONTH OF SEPTEMBER.—1, Louis XIX., of France, died 1715; 1, Jacob B. Moore, historian, died 1853; 2, John Howard born 1726; 2, Great fire in London 1666; 3, Oliver Cromwell died 1658; 4, Stephen H. Long, U. S. A., died 1864; 5, Cardinal Richelieu born, 1638; 5, Prof. J. P. Norton, Yale College, died 1852; 6, La Fayette born 1757; 6, Catherine Beecher born 1800; 7, Queen Elizabeth born 1533; Dr. Samuel Johnson born 1709; 7, Boston settled 1630; 8, Sebastopol taken 1855; 9, Rev. Dr. T. H. Gallaudet died 1851; 10, William the Norman died 1087; 11, Dr. Sylvester Graham died 1851; 11, Daniel S. Dickinson born 1800; 12, Parke Benjamin died 1864; 13, Montaigne died 1592; 13, Fitz Hugh Ludlow died 1870; 14, Humboldt born 1769; 14, Aaron Burr died 1836; 14, Duke of Wellington died 1852; 15, Rev. Dr. David Dudley Field died 1867; 16, John Minor Botts born 1802; 17, United States Constitution adopted 1787; 18, Dr. Johnson born 1709; 19, Henry Cary Lee born 1825; 20, Alexander the Great born 356 B.C.; 20, David Ross Locke ("Nasby") born 1833; 21, Evan McColl, poet, born 1808; 22, Arnold's Treason, 1780; 24, Robert Y. Hayne died 1839; 25, Dr. B. M. Palmer born 1781; 26, Daniel Boone died 1820; 27, Samuel Adams born 1722; 28, Gov. Wm. F. Packer, of Penn., died 1870; 29, Rufus King, LL.D., died 1827; 30, Whitefield died 1770; 30, August Comte, author of Positive Philosophy, died 1857.

Our Mentor's Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, of correspondent shall expect us to give him the benefit of an early consideration.

VENTRILLOQUISM LEARNED.—Is there any method by which ventriloquism can be learned? and, if so, how?

Ans. A writer in the *Chicago Advocate* claims that there is no difficulty in acquiring the ventriloquist's art. In the first place, he says, speak any word or sentence in your own natural tone, then open your mouth and fix your jaws fast, as though trying to hinder any one from opening them farther or shutting them, draw the tongue back in a

ball, speak the same word, and the sound, instead of being formed in the mouth, will be formed in the pharynx. Great attention must be paid to holding the jaws rigid. The sound will then be found to imitate a voice from the other side of the door when it is closed, or under a floor, or through a wall. To imitate a sound behind a door partly open, the voice must not be altered from the original note or pitch, but be made in another part of the mouth. This is done by closing the lips tight, and drawing one corner of the mouth downward or toward the ear. Then let the lips open at that corner only, the other part to remain closed. Next breathe, as it were, the words out of the orifice formed. Do not speak the words distinctly, but expel the breath in short puffs at each word, and as loud as possible. By so doing you produce the illusion in the minds of your listeners that they hear the same voice which they heard when the door was closed, but more distinctly and nearer on account of the door being open. The lips must always be used when the ventriloquist wishes it to appear that the sound comes through an obstacle, but from some one close at hand.

SPELLING.—Can a man be called well-educated who fails in his spelling?

Ans. Some people seem constitutionally deficient in the ability to spell correctly. Such persons we pity. But bad spelling is mostly the result of carelessness, or lack of culture. We happen at this moment to have before us a letter handsomely written so far as penmanship is concerned, in which the man says, "I am at present at the head of the academy, and am studying for the ministry. I am a B-a-b-t-i-s-t." If he were a Presbyterian, such a spelling of the word Baptist would not be excusable, though it is occasionally so spelled. We once saw it so spelled on a costly tombstone, but the maker of it was not a Baptist. But the idea of a Baptist spelling it that way is utterly unexcusable.

We think our common-schools should have the old-fashioned spelling-schools. They should choose sides, and spell to see who would stand the longest. In the ordinary way of teaching spelling there seems to be no strife, no disgrace from failure, and as colleges do not teach spelling, we think much more attention should be paid to that branch in the common-schools.

DOESN'T WANT A BEARD.—Do you know of anything that will prevent the growth of the beard? If you do, please let me know through the columns of your PHRENOLOGICAL JOURNAL. I am a young man, 17½ years of age. A little over one year ago I commenced the practice of shaving—not from necessity, but merely on account of the novelty of the thing. I kept up this practice for about three months, when, after severely cutting myself several times, the novelty of the thing began to wear off, and I determined to quit that practice. But I never made a greater mistake. I shaved no more on account of the "novelty of the thing," but from necessity. This was about a year ago. I don't like to be looked upon as a curiosity, and be pointed at as "the boy with a beard," etc. I am not vain or self-conceited, but I do dread the future; for if this shaving business continues, I will look more like 30 than 18 years of age in a year from now, for if I mean to keep my face anywise clean, I am compelled to get shaved twice a week. If you know of anything that will help me, please let me know through your JOURNAL, and oblige

Ans. The only thing that will prevent the hair from growing is for you to stop—eating and drinking. Do this for one month, and your beard will grow no more; nor will it be necessary for you to shave any more. Try it. But why shave anyway? Is it not manly to wear the beard? There are many foolish fellows who use lots of grease, hoping thereby to make their whiskers grow. Throw away the razor, and use the shears when necessary for convenience and cleanliness.

REPRESSION vs. CONVERSION.—We repress again and again, and may keep on repressing without effecting any permanent good to the individual. For example, a child steals; we punish him. He steals again, more cunningly this time, and we repeat the punishment, more severely; and this makes him *afraid*, not of stealing,

but of being caught at it. This is *repression*. Now, conversion aims to modify the tendency to steal, and to incline the child to a higher and a better life. He thus becomes master of himself, and resists all ordinary temptations. Punishment for wrong-doing means repression; conversion means overcoming evil with good and growth in the graces of life.

RE-LOCATING THE ORGANS.—Have recent scientific men re-located the moral sentiments, now holding them to be in the back of head (domestic propensities), and putting domestic on top?

Ans. Guess not. There are persons—not scientific—who hold that the seat of the mind is in the belly, and not in the brain. This school is slowly disappearing under the bright and shining light of the PHRENOLOGICAL JOURNAL.

FINE HAIR—A BUMP ON THE NOSE.—Does fine hair denote quick temper? What does the bump on the top of the nose signify?

Ans. No, fine hair does not signify either a quick or a slow temper, but a fine grained organization, a quick discernment, and much susceptibility. The "bump on the nose" may indicate defense, aggression, or Combativeness, depending on its location. "New Physiognomy" will answer this and also your other questions.

A WALKING ENCYCLOPEDIA.—You explained the "Walking Dictionary" the other day; please tell which of the New York editors has been styled "The Walking Encyclopedia."

Ans. When connected with the *Evening Post*, and also when a member of the Legislature, this term was applied to our worthy contributor, Dr. Alexander Wilder. Who else can claim the honor?

HEART vs. INTELLECT.—Why do we say "Meditation of the heart" when we mean meditation of the mind?

Ans. In Biblical nomenclature, the word "heart" is used as synonymous with "mind." It is not claimed to be scientific, but is in accordance with popular usage when the Bible was written. Indeed, now-a-days people speak of their hearts "warming up to others," being "hard" or "soft" etc.

AMERICAN SHIPS.—Why is it that nearly all the steamers which ply between Europe and America are owned by foreigners?

Ans. There are several reasons. One is, mechanics in the old country work much cheaper than in the new. Another is, many of the materials which enter into the construction of ships are cheaper there than here. Another reason is, other countries give subsidies toward the support of steam lines to encourage trade with all parts of the world. One cause of English prosperity is the fact that she has a monopoly of the carrying trade of the world by virtue of her subsidized ships. If we would compete, we must invoke Government aid to an equal extent, when we can secure our full share of this traffic.

During the war Great Britain, or numbers of her people, through the connivance of certain of her lords and mercenary ship-builders, fitted out blockade runners and rams, which burned all of our merchant ships they met on the high seas. We finally sank the dreaded Alabama, and destroyed other war ships, but we did not burn merchantmen. We hope, ere long, to re-establish ourselves in this great interest. To this end we advocate school training ships in all our ports; schools in which navigation shall be taught, and every reasonable encouragement given for ship-building.

WANTS TO GROW TALL.—I have a great desire to become tall, and would like to know if it is possible for me to become so. I am now sixteen years of age, and am only five feet in height. My health is good. If you can inform me how this can be done, I would be most grateful.

Ans. A laudable desire, and we would most cheerfully prescribe for the youth had we the desired specific. Could the lad have elected who should have been his parents he might now have had his desires, as to his stature. On the principle that "like begets like," he would have chosen to be born of tall, well-built parents, in which case his own chances would have been good. And this suggests a point, namely: Have parents any right to transmit their infirmities, diseases, dwarfishness, insanity, imbecility, or other imperfections to posterity? In the Sandwich Islands, the lepers, of which there are large numbers, are placed away by themselves on a distant part of the island, and prevented from having any intercourse with those not thus diseased. Why not thus transport—say to Alaska—our moral imbeciles or idiots, including incurable criminals, where they shall not perpetuate *their* infirmities? We simply ask the question.

What They Say.

IS MIND SPIRITUAL OR MATERIAL?

Prof. Barnard, of Columbia College, in his lecture on "Germ Theory" before the Sanitary Science Association, in New York, has given a very succinct account of the progress of minute investigations of microscopic organisms, and the varied deductions of noted scientists; but, strange to say, draws a very gloomy picture of what he considers the necessary and simultaneous annihilation of mind with the death of the body, should the theories of spontaneous generation, organic evolution, and correlation of mental and physical forces prove true; and this he intimates as already too probable, in the opinion of noted scientists, to be an agreeable reflection. Such gloomy foreboding, like the religious conflict with science, has its origin in that human vagary, a mere fancy at best, which has grown into a form of belief, that mind is a spirit; and this belief is well worth an

inquiry into its origin, probable correctness, and adaptability to modern thought.

I suppose all must admit that from the known original gaseous condition of the matter of all globes, all existing inorganic matter has gradually been evolved in its present distinctive characters; and why not organic as well? on the supposition that His intelligence designed, and His impress, or governance of forces, gave formulative laws to matter, adequate to the production of all existing organic and inorganic compounds. Such a supposition conflicts with no known philosophy, and gives an infinitely grander conception of Almighty power and forethought than any fancied conception of the consecutive acts of creation. As matter has no imaginable limit of divisibility, (notwithstanding the atomic theory), its essence, or subtilty, as far as any philosophy can define, or even flight of fancy conceive, may be so infinite as to partake of what we should call a spirit, or non-recognizable materiality, which, to our comprehension, would become a mere function or quality of matter. Of such constitution may be our minds which operate upon and control more or less the grosser matter through the instrumentality of bodily organizations, and thus alone are they capable of outward manifestation.

Of such essence of matter, yet more infinitely subtle, may be the Infinite mind, whose control over all matter, in its functions and correlating forces, becomes appreciable to our minds, as an adequate something operating upon universal matter, while the transcendental idea of a spiritual nothing is not conceivable as a correlating force, or cause of action.

As correlation is often confounded with necessary convertibility, instead of the consecutive production of forces, I may mention that light and heat are said to be correlated, and so convertible terms, although the one may usually succeed and be the immediate cause in the evolution of the other; they are, nevertheless, distinct forces, existing separately as well as combined. Heat may exist without light, or it may be augmented to the production of light; and where light exists heat generally does, but not always, as witness the brilliant phosphorescent lights, whose augmentation is inadequate to the production of heat, by any tests we can apply. Hence light and heat are independent forces.

Prof. Barnard says "that if mental and physical forces are correlated, then as all living organisms grow and decay, mind, too, must decay and be annihilated." But as above shown, in what are called correlations of light and heat, mind and body may be claimed to be separate existences also, only correlated, or acting together, for certain conveniences of mental manifestations. Mind is here believed to be a subtle materiality; it can not, therefore, become non-material, any more than grosser matter can be annihilated; but both may change their correlation, or reciprocal

dependence, as well as place of manifestation. The necessary relations of mental and physical association are or proceed from the reciprocal dependence of all human bodies.

Prof. Barnard again says "that if creation is carried on through the influences of the forces of nature, then it leaves us profoundly at a loss to explain the wisdom or benevolence of bringing into existence life, every day, only to perish on the morrow of their birth." Does he think that all successive organisms are the result of the immediate fiat of God? or that all such organisms are brought about by His formulative laws, tending infallibly to such consecutive developments, without His constant superintendence or intervention? The latter being the only rational conclusion, seeing that such laws are in operation and adequate for all the organic and inorganic effects we know; and seeing, too, that such matter can not act with adaptable purpose merely, and unless directed, our minds are more impressed with His forethought and power over matter, that matter being designed from the beginning, and like a machine which works and fashions without hands, needing only the impress, or application, of a motive force. Assuredly the same creative Intelligence may equally testify His benevolence in providing for the happiness of all, through all time, by such perfect primordial laws, or mechanism, as if He superintended each successive act and evolution of His laws.

Prof. Barnard further says that "if these doctrines are true, all talk of creation, or methods of creation, becomes absurdity: for just as certain as they are true God himself is impossible." Why God is impossible, or His creation an absurdity, the Professor does not inform us; only leaves us to infer his reasons to be as a consequence of the truth of spontaneous generation, organic evolution, and correlation of mental and physical forces. Can it be possible to infer intelligently, that because God has chosen that all matter and organisms should be gradually evolved, instead of directly created in each case, that therefore there is no creation and no God? Instead of admiring his effective simplicity, such pseudo philosophy seems simply to complain of the method. If we could build our houses by mere act of will, through ordained laws under our control, instead of by personal work and superintendence, would we not be warranted in so doing, and would that be an evidence that we did not build the houses, or that we had no existence?

Again, the Professor makes the startling announcement: "If intelligence presupposes a material organism, of which it is a mode of action, then God must be a material organism, or there is no God." Intelligence among finite beings necessarily presupposes a material organism, as all examples evidence, and some mode of material action in such organisms is always a necessity for the mind's manifestation, and which, it is reason-

able to suppose, can have no demonstrable existence, anywhere, without associated organisms. The supposition that the Infinite mind, is, also, material, does not imply that He is clothed with an organism, any more than that the forces we know, which are directly active in creating, are each invested with an organism—His higher essence, precludes such necessity. The, to us, hidden Primal Intelligent First Cause, or Force, may be conceived to be the essence of materiality and the controlling power of all forces which emanate from Himself and reflexly center in Himself; just as that secondary force, electric action in its dual power, accretes and disintegrates all compounds, without itself being an organism. The Infinite requires no organism, for He controls all forces, which thus become His, so to speak, nervous energy; while the lesser force of finite minds requires organisms for manifestation. All other forces are but the blind agents of His will, operating for a purpose known only to Himself, and such forces, not being intelligent, require no organisms.

To return to the main gist of our subject, spirit is claimed as a non-material; we can not say, *something*, for *something*, like *everything*, is material; then spirit, if not something, must assuredly be nothing to our comprehension, occupying no space, and so can not be operative upon anything. Who was the inventor of the idea that mind is a spirit? Probably, far back in the history of our race, some ignorant believer in ghosts, or apparitions of departed spirits, who had no conception of the reign of law over universal matter, while modern discovery necessarily confines the sense of sight to impressions, emanating exclusively from matter. As none have ever pretended to have seen a naked ghost, it always being said to be draped in grave clothes, or the usual habiliments of life, all must have seen much the same ghost of old clothes, an idea too silly for the momentary consideration of rational minds.

If mind is spiritual and brain is material, what link can there be supposable that binds the two together, if it is not a subtile *material*—which must be still opposed to a spirit—nothing equally with brain matter? Though some necessary material link between mind and body may be readily conceived to relate to the brain, what can be imagined to link with and hold a spirit chained in correlation—reciprocal dependence—to such material brain? It is readily comprehended that two materialities may be linked and bound together, so long as the organization of the body remains subject to the affinities of correlation; and thus, too, the materiality of mind is the most rational conclusion.

As all organisms and minds are steeped in matter, so we are individually associated with it, and our minds have no manifestation without it, no possibility of acquiring knowledge, no stimulus for action or thought unless matter is continually

supplied to the brain, to replace the waste caused by previous thoughts.

But it has been stated, that "if mind is material, then varied arrangements of atoms must be the sole cause, or origin, of all varied thoughts." This idea arises from the false atomic theory that all matter is composed of indivisible atoms, each having size, form, and impenetrability, varied for every recognized simple element. It is impossible to imagine anything so small that it has no parts, so solid that it has no interstices and is incapable of division. But that is only a theory, which, because of its very nature, must ever remain unproved. All matter is an enigma to us. We know it only by certain effects upon ourselves, indirectly through our senses, which effects we call its qualities; while some forms or qualities of matter, such as electricity, light, heat, actinism, gravitation, etc., are known in their universal effects, which we can trace; and yet we have no possible understanding why matter, or material forces, should possess such qualities, although we can test their interaction—and so must attribute their action to an intelligent governance.

The varied and wondrous powers of material forces, already detected, lead us to a still higher estimate of their subtilty and capability, and incline us to attribute mental powers to such undiscovered but necessary forces to account for effects remotely traced by science, rather than to maintain that far worse enigma, a spirit mind, which can have no association with matter, in any form or condition, and which is always tending to retard science and the intellectual progress of our race.

Thus matter, in its highest subtilty, may be infinitely capable, or adaptable, to possessing powers of thought as well as action for aught that science can define, or imagination limit; since it probably becomes so ethereally elastic, as to culminate into mere quality, mere effects, just as the quality of mind is only known by its effects. The prejudice of the habit of thinking that our minds are spiritual, makes us loth to admit, or even to consider the question of the possibility of their being material, though that materiality may readily be conceived to be a state of such elastic subtilty as to vanish from our conceptions of mere matter. Everything is undoubtedly matter of which we can take cognizance, and why may not minds partake of the same element? Matter in its highest subtilty, on the verge of vanishing into nothingness, is probably that highest Force, capable of Infinite thought and will, which holds in abeyance all correlated matter, and binds all nature in harmonious whole, rendering action and interaction, throughout creation, a necessity of existence and a recognizable unity. All nature thus becomes a correlated part of God and of our minds, and makes our immortality a certainty.

Admit this doctrine, and the main mysteries of life and cosmical nature vanish in one grand unity. Thus the connection and interaction of mind and

body are readily understood, and how the subtile mind may throw off its connections with our grosser bodies, when no longer suited to our requirements, and become connected with other material bodies, through evolution(?) in other worlds, for the recognition of other material associations. So, too, becomes recognizable the thought, the design, the will, the power, the benevolence and the eternity of the great creative mind, in fashioning all matter, as an attribute or extension of Himself, with which we are honored in association. This doctrine, I believe, gives a higher and juster conception of our existence and association with all material nature and with God, than spirit-minds can possibly admit; while every characteristic of nature and associated creation favors its acceptance. The theories of spontaneous generation, organic evolution, and correlation of mental and physical forces are thus all rendered probable and harmonious with the unity of God and His creations, through primordial formulative laws, in grand cosmical correlation and evolution for all time.

If all nature, as is most probable, is made up of forces in interaction and correlated with God, and its highest subtilty, His mind, then we can readily comprehend His knowledge, as well as control, of all its parts, His omnipresence in that very subtilty correlating with other forces which interpenetrate everything; just as that infinitely lesser force, electricity, is known to interpenetrate everything more gross than it, as well as to aggregate and disintegrate all compounds; flitting from globe to globe in the development of light, heat, actinism, gravitation, etc., etc., ever maintaining its dual powers of attraction and repulsion. In the same manner finite minds and matter are correlated and made to use this same agent—matter everywhere influencing mind, and mind everywhere influencing matter, by interchained relations.

It thus appears to me that the most subtile material force is God, who is thus correlated to and controls all grosser material forces. And this Primal Force, as the Director, is as cognizant of all effects emanating from all subordinate forces as is the finite mind to the performances of its body.

It is surmised that every animal organism, in proportion to development, may as naturally correlate with a portion of that subtile mental materiality as a sponge absorbs water in proportion to its structural fineness. Mind, incipiently undemonstrative, is *individualized* and refined by education, through the organic senses, and thus fitted to associate with yet higher organizations. Thus all minds are alike in kind, differing only in degree of development. As individuals in this world are mainly recognizable by their physical expression (which character impresses), so, in another world, they will have a higher development for more rapid and perfect expression.

The aim and triumph of science is the discovery,

elucidation, and utilization of natural laws and matter for our requirements; and its illustrations, while tending always to our intelligent appreciation of the marvelous adaptability of all matter and laws to serve the general purposes of creation, as well as our own needs, must, as we advance in their comprehension, ever lead us to a higher estimate and grateful worship of Him who, with such wondrous intelligence, power, and benevolence, guides everything, and makes us recipients of His bounteous Self. CHAS. E. TOWNSEND.

WOMAN'S WRONGS.—For some time past the question of Woman's Rights has been agitating the public mind, and various opinions have been expressed upon the subject by both sexes. By some it is thought that if women be allowed to vote, and take an active part in political affairs, much of the evil which now exists will be avoided; by others, that certain ruin will be the result of such an event. I will refrain from giving an opinion upon the political side of the argument, preferring to leave it to those who understand it, and to speak only of woman's wrongs. I do not intend to uphold either sex in wrong-doing, nor to condemn the acts of either unjustly. How many men consider their mother, sisters, or wife as a mere convenience, or a sort of "necessary evil," a slave to their caprices, who must love and cherish them, denying themselves pleasures for their sakes, without a return of affection.

A woman, if a wife, is expected to bear trials of the most aggravating character with a smiling face. She must be calm and serene on all occasions; her lord and master is the only one who has the privilege of indulging his over-wrought feelings by using the imperative mode. She will sit up at night with sick children, and go through a dull routine of work the next day without rest, while he, unmindful of his wife's weary looks, does not think of assisting her until she breaks down from sheer exhaustion. If he takes her place for a few hours, even, all his friends will be informed of his hard fate. To be sure, this is not always the case; still, it is true of many, and some whom I know think it "does not hurt a woman" to lose her rest by caring for sick and fretful children.

I knew the case of a man who was in the habit of abusing his wife in a shameful manner; but this abuse she bore uncomplainingly. Having been suddenly taken ill, however, his hot temper cooled with increasing illness, until he became very gentle and thoughtful. She nursed him with untiring devotion until he recovered. Every one hoped that he had now become a changed man; but after his recovery his treatment of his wife was worse than ever before. So much for sick-bed repentance; but he was always devoted in public, and congratulated himself that no one knew him as he really was.

Affectionate mothers are always self-denying, some too much so, their devotedness tending to

the cultivation of selfishness in their children, rendering them thoughtless of the comfort of others. There is reason in all things; one should never go to extremes. Sisters often deny themselves many things in order to give pleasure to their brothers, and in the vain hope of winning some tribute of affection from them; but how are they often rewarded? by coldness and indifference. Men abhor selfishness in a woman, but seem blind to the fact that they are cultivating the trait themselves. Why are men ashamed of showing affection for mother, sisters, or wife? Real genuine affection is one of the noblest traits in either man or woman, and should always be cultivated, never checked. The world has become sadly degenerate; there is a vast difference between the men of the past and the men of the present day. One can not look at a newspaper without seeing an account of a wife beaten or murdered by her husband. Life is short. Why not make it happy? Let married people help each other, take an interest in each other's joys and sorrows.

LILLIE B. CLYDE.

"WALKING DICTIONARY."—To whom was the appellation "Walking Dictionary" applied?

Ans. This question we can not answer with certainty, but think it was Samuel Johnson, LL.D. Can any reader give us positive information?—*Ans. to Corres., July.*

Hamilton Littlefield, of Oswego, N. Y., a disciple of Gerrit Smith, first used this expression, applying it to his distant relative, Reuben Baker, a man who at fifty had taught forty-nine terms of country school, mostly in Washington and Saratoga counties, to wit, thirty winters and nineteen summers, and whose eldest son is Isaac V. Baker, of Comstock's Landing, N. Y., President of the N. Y. & Canada R. R., now sixty-one years of age, and whose youngest son is G. D. BAKER.

PHRENOLOGY IN TEXAS.—A correspondent writes this, among other matters private, to the editor. He says:

"I am raising four boys, whom I design instructing in Phrenology as soon as they are of suitable age. Two of them have a natural talent for that science. They never see a skull of any animal or bird without carefully examining it. My boys are all well turned fellows, having what you call three-story heads, well built out at the base, large through the middle lobe, and very high above a line from Causality to Caution."

[That is a very satisfactory exhibit. We wish parents generally were as capable of taking the mental and physical stock of their children as this Texas correspondent is of his children.]

BAD PHRENOLOGISTS.—This same writer adds:

"There has never been but two lecturers on Phrenology inside of twenty miles of here—Blanco—and they were notorious rascals and quacks, who almost ruined the cause here, and made more

skeptics and enemies to the science than a good phrenologist could counteract in twice the length of time."

[This is the misfortune we have long suffered under. Vagabonds, under assumed names, have used Phrenology as a counterfeiter uses the name of a genuine bank to impose his worthless trash on an unsuspecting community. We are willing to act as police to the extent of our ability in protecting the public, but we can not be everywhere at the same time. Let all help to expose "rascally quacks," and rid the country of their presence.]

WISDOM.

WE hear the rain fall, but not the snow. Bitter grief is loud, calm grief is silent.—*Aurbach.*

HE that does a base thing in zeal for a friend, burns the golden thread that ties their hearts together.

RELIGION is to live according to the commandments of God, which is in accordance with the laws of love.

PEOPLE often complain of not getting their rights, and it is sometimes well for them that they don't.

THAT man is voted a bore who persists in talking about himself when you wish to talk about yourself.

IT is more difficult to frame an excuse than an oil painting, though they are both works of the imagination.

BE brave in business as you would be in war,
Despair not though disasters hem your way,
Look to the future, e'en success seem yet afar,
Hope for the better at some future day.—*J. E. G.*

THE intellect of man sits visibly enthroned upon his forehead and in his eye, and the heart of man is written upon his countenance.

IT's rather remarkable that while several thousand feet are required to make one rood, a single foot, properly applied, is sufficient to make one well-behaved.

"BRUTES find out where their talents lie;
A bear will not attempt to fly;
A foundered horse will oft debate
Before he tries a five-barr'd gate.
In man we see the only creature
Who, led by folly, combats nature."

MANY young men now wasting midnight kerosene in reading ten-cent romances will be the leaders of progress—the bar-tenders and peanut kings of the side-walk—ten years hence.

IT is said that iron is a good tonic for debilitated young ladies. We do not believe this, but know that ironing is a better one.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

WHEN is the wish father to the thought? When persons on the occurrence of anything say, "I told you so," "It is just as I expected."

A SHOEMAKER out West, with a literary turn of mind, has the following poetical gem attached to his sign:

"Here lives a man who never refuses
To mend all sorts of boots and shoeses."

QUOTE CORRECTLY.—A lady having lost a near relative was visited by her pastor. In reply to some consolatory remark of his, she said, "Ah! my dear sir, I find that God tempers the wind to the shorn lamb, as Solomon says." "Solomon, my dear madam!" said the minister. "That was not Solomon. It was Tristram Shandy."

"WHAT do you sell those fowls for?" inquired a person of a man attempting to dispose of some chickens of questionable appearance. "I sell them for profits," was the answer. "Thank you for the information that they are prophets," responded the querist, "I took them to be patriarchs."

AN infant prodigy exists in Rome. She lives on a corner. Her mother sent her to buy a spool of cotton. The merchant prince she visited raised himself from an old cheese-box, on which his noble form was reclining, and said:

"Will you have Coat's cotton?"

"No," said the little girl, "I don't want Coat's cotton. Ma wants it to sew pa's pants with."

FUNNY FISHING.—The late Chancellor Bibb, in the intervals of his pressing professional duties, was accustomed to gratify his great fondness for fishing. While residing in Washington he used to go to the East Branch, near the United States Navy Yard to enjoy his sport. One fine afternoon the Superintendent of the Navy Yard saw the Judge sitting very still for hours on the bank, and thought he would give him a call. He asked the Judge, "What luck?"

"Not much yet. I had, or thought I had, a nibble about two hours ago, but since that I have felt nothing."

"What do you bait with?"

"With a small, live frog, with the hook through the fleshy part of the thigh."

At this moment the Superintendent began to laugh, and unable to control himself or explain, he rolled on the grass and roared, much to the astonishment and chagrin of his friend the Chancellor. He finally could so far command himself as to point to a log that lay in the water some distance from the shore, and there the Chancellor saw his "bait" patiently sitting on the log in the sun, with the hook and line attached to his thigh. And the Judge joined in the laugh.

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

ACROSS AMERICA; or, The Great West and the Pacific Coast. By James F. Rusling, late Brevet Brigadier-General U. S. V. One vol., 12mo; pp. 503; beveled boards. \$2.50. New York: Sheldon & Co.

A more appropriate title would have been, "A Trip Across (or through) the United States." We will not be critical, however, but accept this creditable production as a thoroughly honest and well-considered work. The writer is a good observer, and his book is full of real instruction. The reader can go with the author from New York to Fort Riley in Kansas, and view the numerous thrifty towns and cities on the way, and have glimpses of the undeveloped resources of the country. From Kansas to the Platte is a section of country full of interest. Thence up the Platte to Denver, in Colorado; thence we go over the country by stage, and may travel on the plains night and day. Such sunsets can nowhere else be seen. Halting awhile at Denver, the traveler may proceed to the various mines, most of which are described in this volume in a racy, impressive manner. Much time in and among the grandest of our mountains may be spent taking excursions on horseback, or muleback, as the case may be; stopping at the beautiful lakes and fishing for trout, camping out at night and drinking soda-water at the one hundred and one springs which bubble up all along the base of the mountains. Indians may be met, but with no fears of the loss of scalps, the red men there having learned that peace is better than war—for them. From the mountains one can push on to Salt Lake, and while away an interesting period among the Mormons, who are described as they are, kindly, justly. The reader will be interested in the views of Mr. Rusling as expressed with regard to this interesting people. Pushing on from Salt Lake he goes to Boise City; thence to the Columbia River, then on and on to Fort Vancouver, thence to San Francisco, where he tarries for a season, and describes life in this famous city of the Pacific coast; thence on to Los Angeles and Wilmington and Fort Yuma; thence on to Tucson and to Prescott, fording rivers, there being no bridges, and coming to the Apaches; thence to Virginia City, back to Stockton, to the Yosemite; thence home to New York. Pictures of distinguished Indians, of Brigham Young, with maps of railways, wood cuts of the Yosemite Valley, of Mount Hood, of the big trees, etc., render the volume one of the most interesting of the season.

LA TÊTE HUMAINE; Etudes Illustrées De Phrénologie et de Physiognomie. Appliquées aux Personnages Célèbres anciens et Modernes. Par Charles Rouvin, auteur des *Sophismes Sociaux*, du *Manuel du Penseur* au XIX^e Siècle, etc. Paris: Jules Boyer et Cie.

Without furnishing any data which are particularly new to the phrenological world, M. Rouvin has, nevertheless, in this new book on "The Human Head," presented a very interesting series of "illustrated studies in Phrenology and Physiognomy, as applied to celebrated characters, ancient and modern." He writes with the calmness and freedom of a man who has thoroughly explored his subject, and is convinced beyond question of the truths he treats upon. How he regards unbelievers is evident in a passage of his preface, where he says: "That he should throw Phrenology aside who does not understand it is plain enough. It is quite another matter when he is convinced after having studied and practiced it." Then he goes on to declare what all our friends will cordially indorse, that Phrenology "is singularly attractive, a strange revelator, and, indeed, constitutes the most solid and the broadest foundation—if not the only impregnable one—for human philosophy, education, and legislation." He deprecates the want of some such method or system in the regulation of French affairs. He writes, "They talk to-day of the necessity of *regenerating* France. The condition of that regeneration—which implies an entire education to be obtained or reobtained—can reside only in the physiological and moral instruction which directs man to know himself, and which furnishes him the means therefor. It is only Phrenology that embraces that instruction."

We notice several illustrations which formerly appeared in the pages of the PHRENOLOGICAL JOURNAL, and for which M. Rouvin has awarded this magazine due credit. As is habitual with French scientific authors, the illustrations are fine specimens of art, and accurate as representations of the point under discussion. Distinguished French characters predominate, as might be expected, but the selection, taken as a whole, is judicious, and makes up quite a gallery of celebrities. The volume is worthy a wide reading, and we shall have occasion to draw from its pages for the benefit of our readers who are not conversant with the French language.

ARCHIVES OF ELECTROLOGY AND NEUROLOGY: A Journal of Electro-Therapeutics and Nervous Diseases. Edited by George M. Beard, A.M., M.D., Member of the New York Society of Neurology and Electrology; of the Medico-Legal Society of New York; Fellow of the New York Academy of Medicine, etc. Vol. I., No. 1. Octavo; pp. 150. Quarterly. Price, \$2.50 a year, in advance; single copies, \$1.50. New York: T. L. Clasher.

Issued in first-rate style, and promises to become a standard work. Those interested in the subject of nervous diseases should send to the publisher

for a circular giving a complete table of contents, from which they may learn the object of this work. We do not forget that Dr. Beard published a book not long since, through the Putnams, in which he recommended the use of alcoholic stimulants in the treatment of diseases. If he still entertains these opinions, we regard him as by no means a safe medical adviser. But we will not judge his recent work by former indiscretions.

CROFUTT'S TRANS-CONTINENTAL TOURIST. Containing a Full and Authentic Description of over Five Hundred Cities, Towns, Villages, Stations, Government Forts and Camps, Mountains, Lakes, Rivers; Sulphur, Soda, and Hot Springs, Scenery, Watering Places, Summer Resorts; Where to Look for and Hunt the Buffalo, Antelope, Deer, and other Game; Trout Fishing, etc. In fact, to tell you What is worth Seeing, Where to See it, Where to go, How to go, and Whom to Stop with while Passing over the Union Pacific Railroad, Central Pacific of California, their Branches and Connections by Stage and Water, from the Atlantic to the Pacific Ocean. Illustrated. Sixth volume, Fifth Annual Revision. One vol., octavo; pp. 160; flexible covers. Price, \$1.50. New York and San Francisco: Geo. A. Crofutt.

This elaborate title explains fully the object of this beautiful book. It is illustrated with full-page engravings, printed on tinted paper, and is every way most tastefully executed. All travelers to California should have a copy, if they would see intelligently what their eyes look upon.

REPORT OF THE SUPERINTENDENT of the United States Coast Survey, Showing the Progress of the Survey during the Year 1870. One vol., quarto. Washington, D. C.

The surveys and observations of 1870 were distributed in localities for the most part widely separated, excepting, perhaps, the extended work on the California coast and at Lake Champlain. We have, besides the reports of the regular work of the different companies engaged in the Coast Survey, a variety of data with regard to important astronomical and meteorological observations undertaken at many different points. The folio volume is illustrated with thirty or more admirably executed maps and diagrams; indeed, the maps are beautiful specimens of minute draughting, and very valuable in themselves.

JESUS THE CURE OF SKEPTICISM. "Looking unto Jesus." By Rev. Henry Matson. One vol., 12mo; pp. 224; muslin. Price, 50 cents. Oberlin, Ohio: E. J. Goodrich.

An earnest history of a human soul seeking light and knowledge while passing through a trying period of skepticism. Mr. Matson recalls the history of his journey from childhood and youth up to manhood. The book will prove a stay and a comfort to those firmly established in faith, and a guide to those still unsettled in their religious belief. Without being dogmatic or narrow in theological view, it is thoroughly orthodox and Christian through and through. The book will no doubt find its way into many Sunday-schools, as

well as into private libraries. It will encourage the author to know that this, his first literary venture, has secured a success—which it richly merits.

SPECIMEN OF AN ATTEMPT AT A CATALOGUE of Original American Books, with Index of Subject-matters. By E. Steiger, New York.

We heartily commend Mr. Steiger's enterprise in this direction, and these specimen pages of the "Bibliotheca Glottica." This work is designed to become a most comprehensive catalogue of publications, embracing those of all languages. Let those interested send stamps for free copies.

HAND-BOOK of the Boston and Maine Railroad to Suburban Homes, Seashore, Lake, and the White Mountains; together with full Description of the Cities, Towns, and Villages Along its Line; with a Schedule of Fares, either by Single, Package, Excursion, or Season Ticket; and List of Trout Streams on this Railroad. Compiled by Edward O. Skelton. Boston: Published by the Boston and Maine Railroad.

A handy little guide-book, with pictorial embellishments, useful and instructive.

THE LABOR AND MONEY QUESTION. A New Catechism of Political Economy. By William Brown. 24mo; pp. 68. John Lovell, publisher, Montreal.

Light and darkness are relative terms; and the average American would look anywhere else for illumination than to the British Provinces. But he is constantly doing worse than absorbing the radiations from such minds as Mr. Brown's and Mr. Buchanan's—both Provincials. In this work Mr. Brown has adopted the Socratic mode of teaching, by queries and replies, thus relieving this much-neglected and abused theme (political economy) of its ordinary tedium. His analysis is exhaustive; his synthesis is well rounded out; and where excellences are many, it is unpleasant to point out defects, which are few. Our space will permit us only to call attention to his extreme bullionism—recognizing no paper or credit as proper. If the author will look to China or Spain, where his theory is more nearly in practice than elsewhere, he will find the evils he mostly deprecates in more intense development than elsewhere. He claims that the gold or silver which represents a day's labor in the mines, has the exchangeable or convertible power to command similar labor elsewhere. Would he kindly, in that connection, inform us how it is, with that ruling, that 5 cents of silver in China, 30 cents in France, 50 cents in England, and \$1.75 in America, exchanges for a day of untrained labor?

THE AMERICAN SWEDENDORG PRINTING AND PUBLISHING SOCIETY. Manual for 1874-5. 12mo pamphlet; pp. 24. General Depository of the Society, Cooper Union, New York.

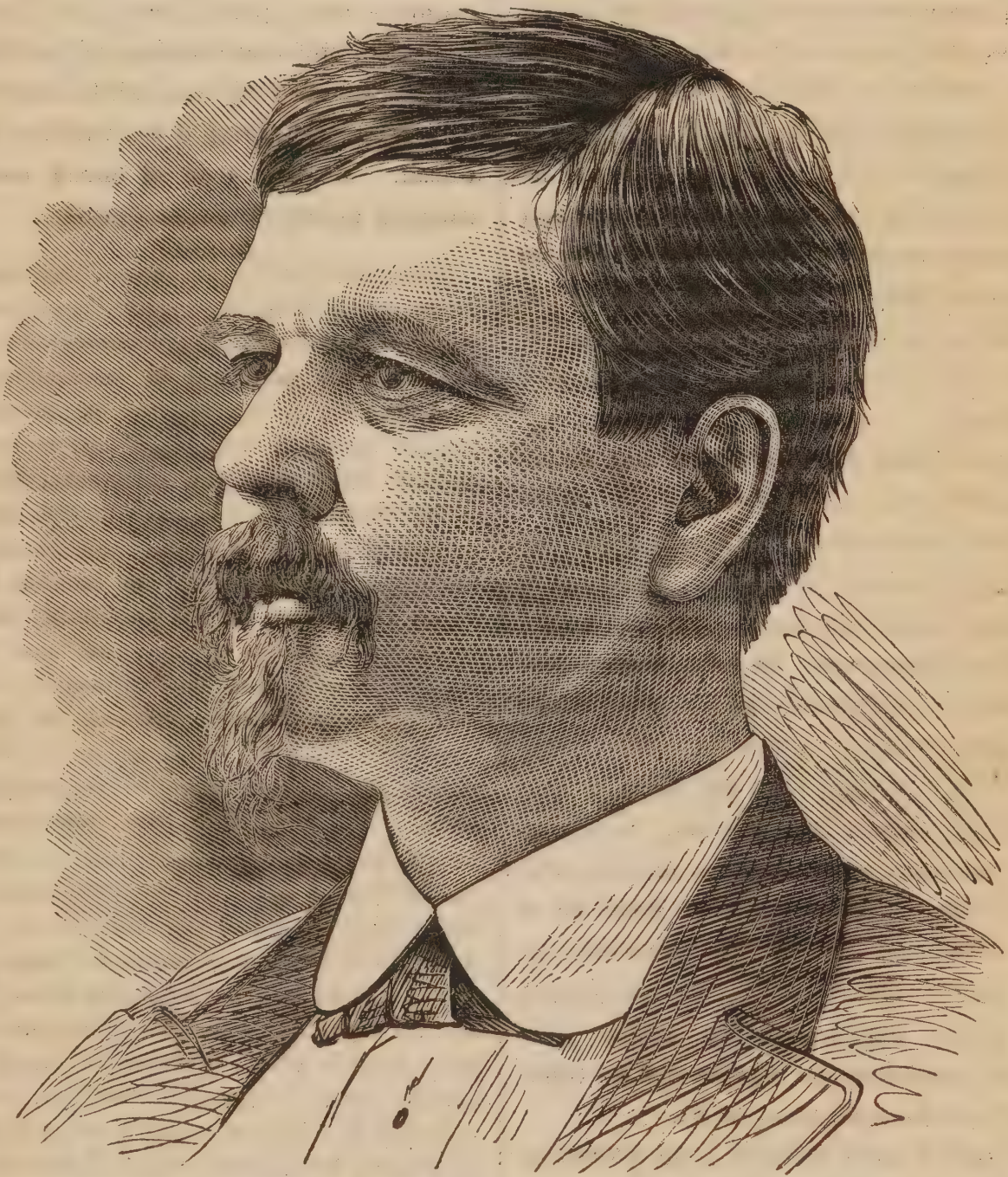
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[WHOLE No. 430



FRANK B. AINSWORTH,

SUPERINTENDENT OF THE INDIANA HOUSE OF REFUGE.

THE following is a synopsis of a phrenological delineation made several months ago, the subject being then unknown to the examiner in charge:

This gentleman has inherited his mother's nature largely; the physical contour of his body, and the configuration of the features and the cast of his intellect have much in

them of the gentle feminine character. He should be known as a quick thinker; his first impressions are usually his best, and if at any time he does not act up to his first intuitive judgment, he finds in the end that if he had fired away at the first good look, he would have hit the mark.

He looks after details sharply; could go into a large factory, or an establishment where many men were employed, and would soon be able to master the various processes there carried on. He is able to plan or outline a business, and in that plan he would group many of the details. As a teacher, he would overlook the whole school, and would soon convince the mischievous that his eyes were on all sides of his head; because he has special capacity for reading their dispositions, and so would know who needed watching.

He has talent for talking; is able to express well whatever he has learned. If he had been educated for the law, and thus for politics, he would be able to stand up in Congress to-day and discuss questions with a half-dozen opponents. He has power enough to make himself poised; and as an army officer he would be cool in judgment, but red-hot in zeal when necessary; he can carry a level head with a great deal of steam. In an emergency, as when his house were on fire, or if there were a riot, or a sudden flood, he at once has at command all the knowledge he may have acquired relating to the matter, and would not become so choked with fear, or excitement, or rage as not to think quickly of the right thing to do.

He would have made a good physician and a fine lecturer in a medical college. He has much sympathy; makes people feel that he suffers when they suffer, and is truly sorry for them when they are unhappy. If he were a teacher or parent, he might punish severely, but would do it in such a way that the culprit would think that he did it for his

good, and not from mere anger or irritation. But he would govern a school or family with less punishment than most men. He has so much kindness in his nature that he dislikes to hurt men personally, yet when thoroughly aroused, there is real severity in him. In discipline he refrains from inflicting punishment as long as he can; but when forbearance has ceased to be a virtue, he can bring authority down pretty heavily for the time being, thinking that certainty of punishment is mercy in the long run, while leniency, if it be unjust, will bring down wrath on many a head. He is a man of much courage, strength, executiveness, and power.

There are few illustrations of the force of character working upon an active and adaptable intellect to produce excellence in a special direction more apt or instructive than that afforded by the subject of this sketch. He now stands at the head of one of the largest and most successful reformatory schools of the country, the Indiana House of Refuge, and its success is mainly, if not wholly, due to his peculiar fitness for so peculiar a service. He took it at the beginning, and directed or suggested all that has been developed in it, and what that is may be seen in the testimony of one of the first and present Trustees, which is contained in the closing paragraphs of this sketch. To organize, construct "from the ground up," and maintain in constantly increasing usefulness an institution intrusted with the instruction and reformation of two hundred and seventy of the worst boys in a population of nearly two millions is no little achievement for any man, and for a young and self-made man of thirty-three years is almost a marvel of moral force and intellectual vigor and elasticity.

Frank B. Ainsworth was born on the 11th of August, 1841, in Lisbon, St. Lawrence Co., New York, where his parents were among the highly respected residents. He had, as seems to be the usual lot of those who struggle to distinction in the better services of life, no advantages of wealth or opportunities of education. Until he was thirteen he had very little "schooling," and little more chance to improve himself by observation or associa-

tion. At that age he left home and entered the household of George Parish, Esq., the well known millionaire, where he filled the place of "private butler." Two years of this service, in which he had no school opportunities at all, although he availed himself of what advantages were afforded of improving association and private reading and study, determined him to seek a wider field both of work and improvement. He obtained employment which enabled him during the summer to secure the means of attending school during the winter, and continued this alternation for three years. Then, at the age of eighteen, he entered the St. Lawrence University, teaching school through the winter for the means to pay his college expenses during the summer. He thus obtained all the "regular" education he possesses. At the age of twenty-three, December 23d, 1863, he enlisted as a private soldier in the Sixth Regiment of New York Heavy Artillery, Col. J. Howard Kitching, and served till the close of the war, nearly two years, and during that time was promoted and assigned to staff duty, filling every position on the staff from Aid to Acting Assistant Adjutant-General. Having a strong taste for military service, and having with characteristic energy made himself master of the elements of soldierly duty in drill and tactical operations, he for a time entertained the idea of getting an appointment in the regular army, and secured some handsome testimonials from his officers to that end. But seeing the strife and trouble in a course where so many were working for like appointments, he abandoned the purpose without making any attempt to carry it out, and in September, 1865, shortly after his discharge, went to Lancaster, Ohio, where he entered the reform school of that State as an assistant. He began like all thorough and successful workers, at the bottom, and climbed steadily up by faithful service to the post of principal teacher of that institution. In this labor he developed that peculiar power of laying hold of the better elements of the unruly and perverted natures of boys, and of molding them to honorable and useful service, which has gained him so enviable a position in the ranks of the benefactors of society, and given him the highest esteem and confidence of the Trustees of the Indiana

House of Refuge, as the following statement of one of them shows:

"The House of Refuge at Plainfield, Ind., was organized under an act of the Indiana Legislature, approved March 8th, 1867. The Superintendent and Matron, Mr. and Mrs. Frank B. Ainsworth, were procured from the Ohio State Reform School, where he had developed as Elder Brother an unusual capacity for the government of boys. The first boys admitted to the Indiana House of Refuge were received from the State Penitentiary. They were a hard set (ten in number), mostly old in crime and some of them older in years than they had represented themselves to be. The experiment of taking them into an *open* institution, to which were rapidly added other similar boys, professedly under eighteen but many of them really twenty-one or twenty-two years of age, was a very hazardous one, and under a less efficient head would have totally failed. The unusual power of government possessed by Mr. Ainsworth enabled him to retain them, bring them under thorough discipline, utilize their labor in the necessary improvements on the farm and about the buildings, and finally to reform most of them. Many of them are now filling useful places in the community. In addition to the difficulty connected with the management of such a class of boys, was the great labor of organizing and controlling such an institution, qualifying the necessary officers and subordinates, and procuring suitable help. It was a great tax upon the mental and physical powers of Mr. Ainsworth, but he was untiring, gave personal attention to all details, conducted a family when necessary, imparted moral and religious instruction, preached on the Sabbath, and otherwise labored night and day for the success of the institution. Founded originally on the same general principles of the Rauhe Haus at Hamburg, and following the example of the Ohio State Reform School, the active mind of Mr. Ainsworth has adopted many improvements, and shown no little originality in his methods. Almost constantly new buildings have been erected, and the labor of the boys has been utilized for various purposes."

The institution has grown up in the face of many difficulties, and now numbers two hundred and seventy boys, and has few, if any, superiors as a reformatory.

PHRENOLOGY A SCIENCE.

THE phrenologist is often confronted by philosophers, mathematicians, physicians, and metaphysicians, with the remark that Phrenology is not an *exact* science. Now, there is but one *exact* science, viz., mathematics; and every science which is more or less based on mathematics, like chemistry, is exact in proportion as mathematics can be successfully employed in prosecuting it.

But what is science? The lexicographer tells us that it is "a collection of principles relative to a subject arranged in systematic order."

There is a science of music, there is also an art connected with it. Whatever theoretical principles can be applied to a subject may be called its science, while the application of those principles in practice may be called an art. We have known some phrenologists who were very sound as writers, who could explain the mental faculties and their various combinations with correctness and skill, but were not half so well able to go into a crowd of school boys or into a group of prisoners and apply the science *as an art* as some men are who have little learning and are unable to explain successfully the philosophical principles on which Phrenology is based.

To be a good phrenologist one needs an excellent mental organization. The better his development the more nearly perfect will be his knowledge of the subject and his power to render it available to others.

A man whose head is large in the upper half may be an excellent writer on Phrenology; and one who is largely developed in the lower half of the head may be a good delineator of character, especially as it applies to daily life and secular success; but he who would take the whole range of the mentality and read a man's character as it relates to the physical and philosophical, to the sentimental and the religious, must have both the lower and the upper half of the head well developed.

The phrenologist whose brain is deficient in one of the faculties will show that deficiency when he comes to describe others in that respect. His description, then, will be like

crank music, without soul. It will be like the description which a merely intellectual man may give of a mother's tender love, with neither love nor tenderness in it. One does not need to have an eloquent tongue or an extended education or fine accomplishments to talk about a mother's love whose own heart is brim-full of the sentiment; every utterance will be full of the subject matter.

Phrenology, as a science, attempts to explain the relations of the brain with the mind. By a laborious collection and comparison of facts the different parts of the brain have been ascertained to be the organs for the manifestation of different mental faculties. Those who have read our articles on the discovery of the organs, published not long since in the PHRENOLOGICAL JOURNAL, will comprehend this assertion.

The head has not been mapped out as the designer plans a carpet, or shawl, or pattern of oil-cloth, but when a peculiar development of the head and a particular manifestation of character were observed, and several persons were found with the same development and the same characteristics, it was a hint to further observation, and the result has been that all the known faculties of memory, imagination, judgment, will, understanding, sentiment, affection, fear, anger, pride, have been found connected with particular parts of the brain respectively.

The phrenologist, then, with these scientific data, is introduced to a stranger, and proceeds to contemplate the temperament or quality of the constitution as a whole, to learn thereby whether it be active or sluggish, whether it be strong or weak, fine or coarse, elevated or gross.

That which is called temperament is as important in estimating the strength of the brain as a whole, and of the special organs in particular, as a judgment of timber is important and necessary to a man who is selecting material for the construction of bridges, houses, or carriages, and one who is accustomed to the study of temperament will be able to estimate quality by the laws of temperament as correctly as timber dealers or cloth dealers, or those accustomed to the use

of leather can make discriminations in respect to the articles in their line of business.

When the temperament is ascertained, the quality and constitutional vigor are definitely understood. The next question the phrenologist has to answer, is, how is the brain developed? Is it located over and about the ears, indicating severity, appetite, propensity and selfishness? Is the development backward in the region of the social organs, giving the man a strong tendency to society and its joys? Is it developed forward of the ears largely? Is it long from the opening of the ear to the root of the nose? Then the intellectual forces are strongly marked. There are two kinds of intellect, the perceptive and reflective. The range of organs situated across the brows comprises those of observation, power of acquiring knowledge of things, forms, proportions, magnitudes, arrangements, colors, numbers, and the like.

If the head be largely developed in the upper part of the forehead, the subject is a reasoner, thinker, and has comprehensiveness of mind. If the head be low and flat on the top, the moral organs are weak, the individual lacks restraining power. If the head towers high there is a sense of the future life, a tendency to be philanthropic, deferential, conscientious, and persevering. Is the head large at the crown? then the person is self-confident, determined, ambitious, proud-spirited, and watchful.

Thus, by estimating the brain as a whole, comprehending the qualities by which its strength and activity are determined, then by estimating the groups which are largest, whether the intellectual, moral, aspirational, social, or selfish, he places the stranger where he belongs in the scale of mental being. Some are weak, some are boisterous, some are gentle, others are fierce, stern, and overbearing. These traits of character everybody understands, but Phrenology comes in and decides who has this and who has that. Phrenology will take the bare skull of a man dead fifty years and describe him as his friends knew him during life. No other system of mental philosophy which the world has ever known has made any attempt at reading men at sight.

This being true, it will be seen at a glance that educators should be the most devoted friends of Phrenology. They should under-

stand its teachings and apply them in their relations with their pupils, in the selection of studies for each, and the application of requisite guidance and control in each case. Courts of justice, administrators of law, keepers of prisons and asylums for the insane, managers of business establishments, should avail themselves of the teachings of Phrenology in order to administer with wisdom and the certainty of the best success.

There is not a man, if not an idiot or insane, who can not, by proper treatment, be made something more than belongs to him in his ordinary condition. Phrenology points out the weak points and the strong ones, gives instruction as to how each faculty may be best aroused and guided in the child, how each human being, if properly studied, can be made the most of.

Phrenology is not a dead thing, does not sleep, but is going on like a deep stream in the valley, not noisy, perhaps, but making sure progress and carrying beneficence wherever it goes.

FRET—FRET—FRET.

IT is not work that kills men; it is hurry and worry. Work is healthful. You can hardly put more work on a man than he can bear. Worry is rust upon the blade. It is not the revolution that destroys the machinery, but the friction. Fear secretes acid, but love and truth are sweet juices.

We know a man with a patient, good Christian wife, and we never heard him speak a kind, pleasant word to her, and doubt if he ever did in the half century they have lived together. He is always in a fret, fret, fret. You would think he was made of cross-grained timber, and had always been trying to digest a cross-cut saw. He is eternally cross, and thinks that his wife and children, hired hands, and all the domestic animals have entered into a combination to worry him to death. He is not only rusty, but fairly crusted over with it. Friction has literally worn him out, and he will soon worry himself to death. Of course he has never worked to any advantage to himself or anybody else. With him everything goes wrong. He superstitiously believes it is because the devil has a spite against him,

when in truth it is nothing but his own fretfulness.—*Christian Advocate.*

[Look at that man's mouth. It will be found to be drawn away down at the outer corners like a new moon with the horns down, down, down. What sort of a "head to a family" is such a "curmudgeon?" He

ought to be put in a wet sheet pack till the sour secretions shall be soaked or sweated out of him, and then dipped in treacle till thoroughly sweetened. Does he smoke, chew, or drink? Let him stop it, and see if he can not make the corners of his mouth turn the other way.]

PURITY OF LIFE.

PURITY of thought, word, and act! What a jewel! What a *rare* jewel among the *sterner* sex! By the word "purity" I do not mean a trait of character that has sex—that is *feminine*—I accept it in its original meaning, God's meaning, as a high trait of *human* character of which the world has given some fine specimens, both male and female, just as it has given, at times, brave women as well as brave men, and in the face of counter associations and influences. The purity of mind possessed by Washington, the bravery of Grace Darling, give us no sense of unfitness in either, but heighten a hundred-fold the character of each.

In our unripe age, unripe because still so full of the acids of prejudice and ignorance, it has become the custom for the sexes, instead of each cultivating both these noble traits, which do not conflict in the least, to divide them. Men emulate in bravery great characters of history, but are very indifferent to the cleanliness of their minds. Women aim to be pearls of purity, while they may be the most arrant of cowards. Let us each strive to develop both traits. It lies in our power. But while grossness of appetite is thoughtlessly cultivated by man in word, thought, and act, and mere delicacy is admired by woman, we shall have a zigzag world, with families and individuals all awry, abuses of all sorts abounding—one sex the victim of the other.

Providence has set in history a brilliant beacon-light for our guidance—the beautiful character of Christ. What makes the divine manliness of his character but its purity? The gentlemen of our day, however, leave this incomparable light to woman, and prefer to grind their barks of life among the breakers. Religion aside, purity of life, cleanliness of mind are pre-eminently manly and God-like. There is a theater here for a display of the mental strength of which man boasts. If he have greater strength of mind than his sisters, which, from his actions, I beg leave to doubt, and

if his temptations are greater, let him use his superior strength to overcome his superior temptation. Reserve is fascinating; it is one secret of woman's power to charm. A pure-minded man, so rarely found except among preachers and ministers, is almost worthy any woman's worship, especially if he be outside the barricades that preserve the priest and preacher—say in political life or "on change," where he meets temptations face to face.

All women admire men of exalted purity of life more than they do the leering, *double-entendre*, coarse-grained sort many of them have to deal with. One now-a-days can hardly make an innocent remark in company without hearing a vulgar turn given to it, and which one must assume idiocy almost to appear not to understand it. Now this habit is one of the means that assist in cultivating the lower propensities of human nature. It is very common among many men to converse freely on impure topics before their infant and youthful sons, who, thus listening and indoctrinated, become worthy successors of their sires, while their little girls are being taught that the "moon is made of green cheese," and every indelicate word or act carefully avoided in their presence.

I believe the world *owes* it to boys, as well as to girls, that they shall be brought up to manhood with clean minds; this condition is much more necessary than clean faces, hands, and clothing, although the latter would naturally be associated with the former condition.

Purity in the training of boys does not make girls of them. They do not grow unmanly, as is too commonly believed, by being taught modesty. Lately it was my pleasure to remain a short time in a family in which there were four or five well brought up boys and young men. They were a stalwart, handsome, manly set, with a self-respect and modesty that gave them a certain dignity, young as they were; but they had a live mother, though only a

plain, unlearned woman. They were obedient, affectionate, and respectful to her. She had made every effort to educate them; to arouse their ambition and industry, and had succeeded well, but especially was she anxious about their morals. I believe this article was suggested by observing in her homely but excellent face her motherly solicitude when they were likely to be exposed to evil companions.

Among farmers, society does not resolve itself into castes, but at their social gatherings, or "dances," as they are called, the lowest characters, even in point of morals, may mingle with the best. I repeat, one could see the struggle in this mother-face between marring the pleasure of her brood and seeing them among evil associates. Her boys understood it, too, and sometimes would say, "Mother, I don't care at all about going, I am going to stay at home." They were entirely trustworthy abroad, as the following incident will prove: A neighbor's son came one day to visit them. The mother's countenance darkened as she saw him approach. She said to me afterward, "I imagine my boys will learn more vileness from that fellow in an hour than they would in a year out of his company; he's had no trainin'." At the school which these young men attended, I noticed them when together; though they were companionable, social, and pleasant with this neighbor, one could see the good mother's influence reaching out from home. There seemed no cordial interchange of commodities of a low nature, but they unconsciously refined their neighbor, and imparted to him greater self-respect.

Of late years I perceive a growing tendency in society, even among, otherwise, refined *young ladies*, to witticisms of a double nature. I suppose it is a reaction from the excessive mock-modesty of the last generation or two, when most women of the upper classes were mere pretty poodles in the hands of their husbands and children, and when it was considered the height of delicacy for young ladies to pine and die for want of a little confidence between them and their mothers and sisters. The other extreme is far more deplorable, for it may kill *moral life*. One had much better die physically than morally. True modesty is virtue's strongest barrier; it lost, all is lost. But let it be like the blade of Damascus, which could be bent to the hilt without breaking. Let woman be brave enough to say, with conscious dignity, anything that is necessary to be said, but let her not convey one thought or word that is uncalled for and immodest. I see no reason

why the same advice would not be as advantageous to her brother as to her.

It is true that the state of affairs thus induced would seem a tremendous sacrifice to many of the present generation, for no wit is so easy, irresistible, and scintillating as vulgar wit, especially when it can be expressed without one indelicate word, by turning with a mere shrug, or cough, or glance other people's harmless speeches. Many who now pass for wits would have no stock in trade left. I think Satan must have a very large venture in this department of social intercourse, it is so subtle a way of undermining, in time, the modesty and virtue of a community. But never fear, true wit shines the brighter in the absence of the paste jewel, and there is abundance of room left for geniality, humor, hilarity, jollity, and amusement.

There is much in a name. Let us call purity of life by a truer, more familiar name, CLEANLINESS OF THOUGHT, and thus remove it from a far away region to an accessible neighborhood. The handsomest tribute to the character of the late Horace Greeley was that his most intimate male friends never knew him to joke on indelicate subjects.

KATE KAVANAGH.

A DREAM.

ONCE on my couch, while in a pleasant dream,
A strange new light, as from some planet fair,
Upon my vision dawned, which brighter grew,
Until a world it seemed. And soon a head
Of giant form again it did appear,
Around whose brow the dark vines curling drooped,
While the lithe trees, like masses of brown hair
By the wind combed, in fair profusion lay,
And all the streams seemed veins, whose pulses
throbbed

In rhythmic measure in their ebb and flow
To warblings of bright birds while on the wing,
While o'er the brain quite picturesquely marked
In clouds of every hue, fleecy and bright,
Each organ well delineated lay,
And where the wildest scenery appeared,
Sublimity in all her grandeur sat,
With eye uplifted. Midst the garden's bloom
Imagination roved. Upon the hills
Hope swept a golden harp with tuneful hand;
Constructiveness wore the crown of builded cities;
And where the nations were most barbarous,
Large-sinewed armed Combativeness reigned king.
Oft I marveled, as on these powers I gazed,
To see that each appropriately wore
Such fitting crown, and that being balanced well,
A smiling heaven now reigned where once was hell.

C. CORDNER.

MORBID MOODS OF MIGHTY MINDS.

THE late unpleasantness between the editor of the *Golden Age* and the famous pastor of Plymouth Church furnishes the data for pointing several profitable morals. One of them involves a pathological problem which I propose to solve, with no reference, however, to the guilt or innocence, the discretion or folly, of any person directly or indirectly concerned in this controversy. The editors of the leading newspapers do not seem to understand how a powerful mind should have morbid moods at all, nor why, if morbid, the moods should be manifested in acts of weakness or extravagance. This puzzle is stated by the *Philadelphia Press* in the following words:

"The interest of Mr. Beecher's statement centers chiefly in the wonderful revelation which it makes of the man. This great editor, orator, and leader, who was to so many of us the impersonation of health and buoyancy and energy, seems to have largely spent his hours off duty in a condition of deep and often morbid depression. This man, whose counsels fell every Sunday from Plymouth pulpit, and were so good, so healthy, and so sound that the whole press of the country, without regard to creed or politics, or special mission, took pleasure in reproducing them for the benefit of all—this man, of all others, when confronted with personal difficulties, acted perhaps more weakly and unwisely than the average common-place person. The man who taught others to bear up bravely under troubles, whose words were those of cheer and comfort throughout all the world, was driven by trouble himself into the most mortifying and embarrassing of complications. It is but another of the startling developments which beset this whole case."

The rationale of this "startling development" is plain enough when viewed from the Phreno-physiological stand-point; and as Mr. Beecher, in this respect, is a typical rather than a peculiar man, the matter ought to be better understood by those whose business it is not only to make newspapers, but, also, to a great extent, to manufacture public sentiment.

The universal law that "action and reaction are equal," applies to mental powers and bodily functions as well as to physical na-

ture. In the material world this law is seen in the vapor which rises from the ocean in the torrid zone, returning to earth in the Arctic regions in the form of snow; in the excessive heat of a summer morning producing a hail storm in the afternoon; in the greater dews where there is less rain, and in a thousand manifestations of ever-varying, yet always compensating, electrical and meteorological phenomena. In the vital domain the law is apparent in the collapse that invariably succeeds stimulation; the bodily fatigue that always follows great muscular exertion, and in the depression that is a constant sequence of excessive mental labor. No matter how we use or abuse our bodily organs or mental powers, there is no escaping the law of compensation by which the equilibrium, indeed, the existence, of the universe is maintained.

Men who have powerful brains or gigantic minds are apt to undertake herculean labors. The motive may be fame, gold, or philanthropy; but when impulses are strong and opportunities many, overwork is almost a necessity. The world knows little of the morbid moods and silent sufferings of those who make the books which instruct, the poems which inspire, the sermons which regenerate, and the fictions which amuse the masses. Authors, poets, preachers, and comedians keep their morbid conditions to themselves as a general rule. They give their talent, their healthful thoughts and emotions, their normal moods, to others, and keep their abnormal states, and, may be, bodily tortures and mental agonies, to themselves.

Their work necessitates this. The world only wants what they can do for others. It has no concern with their private griefs. Were they to dwell on their morbid moods, tell of them, or even expose them carelessly, the world would condemn them and their teachings. Their influence would be lost; their hearers and readers do not care so much how they feel, but want to know what they can say and do. Besides, complaining would only be a waste of precious time. Hard workers are too busy to complain of personal matters.

To apply these principles to the person who has been compelled by the force of extraordinary circumstances to bring his morbid moods, long successfully concealed, prominently before the public, Henry Ward Beecher, as everybody knows, is an extraordinary worker. His extraordinary abilities are not only taxed to the full extent of their working capacity, but constantly overtaxed. He has not only a full day's work before him every day of every year, but is constantly called on for extra duty. Moreover, his labors, as editor, author, preacher, lecturer, are so diverse as to keep his mind constantly on the strain, so that when opportunity for rest or relaxation comes, bodily collapse and mental depression are the inevitable consequences.

How can a mind so occupied be clear, cool, calculating, wise in the mere worldly sense, in personal matters or trifles? Why should not plotting knaves cheat him, and selfish busy-bodies entangle him in dubious correspondence? He must go along with his work, fulfill his contracts, perform his engagements to pulpit, press, and public, let what will happen. What is a thousand dollars, or ten thousand, if difficulties of any kind can be settled so that time need not be wasted? The money he can do without. The work must be done or he must die.

Mr. Beecher fully understood his own condition; and he knew how difficult, if not impossible, it was for others to understand it. If he had desired sympathy, assistance, or medication, no one could render it. Work was the malady, and the work must go on.

It is almost an every-day occurrence for persons who have reached the age of sixty or more years, to die suddenly of congestion of the brain. Ministers occasionally fall dead in their pulpits; and other persons sink down and die at their tables; and others, soon after some special mental effort, cease to breathe. Probably every reader of this article can recall several instances of sudden death in this manner during the past year.

Such incessant mental work as Mr. Beecher was addicted to, with the irregular habits which must necessarily, to some extent, accompany it, produced a chronic congestion of the brain, constituting a predisposition to apoplexy. This Mr. Beecher well understood,

for probably few, if any, clergymen in the world are better informed in Phrenology and Physiology than he is. He could not help knowing his liability to die suddenly as many others have in similar circumstances; yet he had reason to believe that, if he could have peace in relation to outside issues, he could keep his morbid moods to himself, maintain his balance, and work on for several years, and perhaps until a time for less labor and more rest should remove the causes of morbid moods.

But at last he has been obliged to disclose his morbid moods, and the editors are puzzled exceedingly. The man of excellent health, gigantic mind, wonderful genius, godly life, and marvelous works—why should he be sick, or weak, or morbid? They might as well ask what business he had to be human? He is just the one to have morbid moods of all kinds. Strong constitutions, when exhausted, are "powerfully weak." Logical minds, when insane, are the most absurd of all persons. Buoyant, animal spirits, when depressed, go to the extreme of wretchedness. Conscientiousness, when morbidly affected, becomes remorse. Great joy in hopefulness leads to excessive grief in failure or despondency.

Whatever may have been the relations of Mr. Beecher to other persons, he had times of worryment, anxiety, doubt, and despondency in relation to them; and these feelings, so far as they are disclosed in his hurried letters, express his mental condition as naturally as extremely abnormal moods and language follow overworked and unbalanced powers while in the normal state. When ordinary minds are disturbed with fears, anxiety, losses, or disappointments, they express the emotions in ways and language that to others may seem very strange; and when extraordinary persons suffer in a similar manner, their words and actions may seem still more inconsistent and extravagant. But in all cases nature is true to herself; and no one is great enough to get outside of or above her laws.

R. T. TRALL, M.D.

CRUELTY AND CRIME.—A writer in Mr. Bergh's paper, *The Animal Kingdom*, presents some curious statistics of the connection between crime and cruelty. Out of 2,000 convicts

of whom inquiry was made, only 12 admitted they left pets at home. This is in accordance with the experience of all visitors among the poor. They will tell us that the flower-pot in the window, the canary hung in the sunshine, the comfortable cat on the hearth, are sure indications of the best house in the district or the quietest room in the tenement. It is going too far perhaps to claim that cruelty to animals is

the first step in crime. Crime and cruelty are equally the results of a bad disposition and bad training. It is certain, however, that tenderness to the brute creation does mollify and refine the temper, and so it is from no mere sentimental tenderness that we applaud Mr. Bergh's noble efforts, but from a conviction that they are indirectly doing as much good to men as to brutes.

UNBEND THAT BROW OF SADNESS.

UNBEND that brow of sadness, lone one, in sorrow's thrall;

Look up in grateful gladness, for God is over all;
Will not His care enfold thee, Who marks the sorrow's fall?

Look skyward, weary wanderer, its dome shall yet be clear;

This life was ne'er intended to be elysian here—
Its sorrows will refine thee for an immortal sphere.

Oh, mid earth's bitter trials, when the soul is bowed
with care, [can bear,

And the burdens cast upon us seem more than we
Let us lift the spirit heavenward, to the life unfettered there.

What will it matter, mortal, in a few fast-fleeting
years, [row's tears,

If earth were not all brightness, undimmed by sorrow—
When we are safely anchored in heaven's eternal spheres?
MAGGIE A. JENNINGS.

"WHAT AM I GOOD FOR?"

CONTENTMENT implies indolence. No enterprising man, who would better his condition, or who would improve his mind, body, or estate, will rest on his oars and permit himself to float lazily down the sluggish stream of contentment, or, with the ebbing tide, float out on the glossy sea of apathy. A young man of true energy would get an education, learn a trade, an art, or engage in a business. He is not content to stand still, lose time, and rust away.

Were each of us quite *content* we would make no exertions for improvement, to correct errors or abuses; nor would we seek to make new discoveries, new inventions, or new methods for lessening human labor, and so forth. Was Livingston, who explored Africa, contented? Was Howard content to permit poor prisoners to rot in their dungeons? Was Florence Nightingale content to permit wounded soldiers to perish on the battle-field, or in hospital, when a little timely aid and good nursing would restore them? Neither was the Saviour content to permit the world to remain in ignorance and in sin, to go down to graves of darkness and despair, when there was a better way leading to a life beyond. Had He been content to leave the world no better than

He found it, He had not suffered an ignominious death. So of the martyred Apostles, and to a lesser degree, so of all who strive and suffer for the truth and for the good of their fellow-men. Were we content with the present state of things—with the tippling, the gambling, the lying, deceit, slandering, thieving, robbing, and the murdering, of which we see and hear so much all around us, we would probably "never mind," but "let the world slide," and, Rip Van Winkle like, go to sleep in utter indifference. But we are living in a crude, selfish, low-down, undeveloped, wicked world; and there is work for each and all to do. This is a time for growth, development, usefulness; action, is life; inaction, is death.

Drones in the human hive may have their uses, but the workers certainly have theirs, and will have their reward.

"WHAT AM I GOOD FOR?" Remember the parable of the talents—one had ten, another five, another two, and another one. So it is among men to-day. Our "talents" may be compared with money, with education, acquired art, natural gifts, or with opportunity to do good. If we use our one, two, or five talents to the best of our ability, we shall be accepted, and earn the approval of Him

who judges righteously. The comforting words, "Well done, thou good and faithful servant," will be set opposite our names in the great book, whose records give a complete history of each individual life. Are we so living to-day that we can ask or hope for God's blessing on our course? This is our right, our privilege, our duty. We may count our passing moments as unimportant, as they may appear to be uneventful. But "time flies," and we must fly to keep up, or be left behind; each second, like the tick of a clock, makes its record. We do not realize this until we come into middle life or old age, when, if our time has been frittered away, we are punished in a "hell" of regrets, for "lost time, lost opportunity." There is a hereafter as well as a present, even in this life—and

"It is not all of life to live,
Nor all of death to die."

And we are to answer both here and hereafter for the deeds done in the body.

"What am I good for?" To learn what is God's will, and to do it. To learn the objects of your creation, of your existence. Your eyes were made to see, your ears to hear, your feet to walk, your teeth to eat, your stomach to digest, your lungs to breathe, your heart to circulate the blood, and your brain to be the instrument through which the mind acts, thinks, feels, learns, and understands. Looked at in whole or in part, with the naked eye, or with a microscope, what a wonderful mechanism is this human structure!

"How almost Divine!"

How capable of enjoyment, when properly occupied and in right relations with itself, the world, and its Maker! And how capable of suffering, when *perverted*! Of all sentient creatures, in earth and heaven, man is most capable of pleasure and of pain.

The end and aim of existence is happiness. From the cradle to the grave, man's course should ever be:

"Nearer, my God, to Thee,"

physically, mentally, and spiritually. And when one with Him, we can say and feel, "Our Father, who art in heaven, hallowed be thy name," and "THY will be done on earth as in heaven, and forgive us *our* trespasses as *we* forgive those who trespass against us."

When we can say this, and submit ourselves

wholly to what we may believe to be His will and good-pleasure, we shall, no matter what betide, find peace for our souls, and lie comparatively happy.

Let us, then, find out, as best we may, what are the number and degree of the talents vouchsafed to us, and put them to the best use. All useful labor is honorable in the sight of heaven. Can we best serve God and our fellow-men by cultivating the earth and bringing forth her rich treasures of fruits, roots, or grain? Or shall we become shepherds and watch our flocks? What pursuits can be more healthful than these? Can we navigate old ocean and carry our products and the Gospel with glad-tidings to all the world? Can we build houses, ships, railways, and other structures? Can we teach, preach, write, print, publish, buy, sell, cut, make, advise, counsel, care for and assist the helpless? Can we do any of these things? God will bless us in the doing, as those for whom it may be done.

If you read the commandments, you will see what you may *not* do. We doubt if any sane and intelligent man can ask God's blessing on drunkenness or drunkard-makers, or gambling, or licentiousness, or deception, slander, fraud, or on any other wrong-doing. Can any one justify himself in living a *perverted* life? Is it in accord with God's will, or with the laws of health, that we smoke, chew, or snuff tobacco? Can we, in sincerity, ask Him to bless it to our use? Would not that be wicked mockery? Judge ye what *is* God's will in all respects, and do it, and *this* is "what you are good for." ED.

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OCCUPATION A MEANS OF GRACE.—A teacher asks *The Christian at Work* the following question:

"We have several pugilistic boys in our school—how can we manage them?"

And this is the answer:

"Easily enough. Give them something to do, and keep them so busy that they have no time to fight. If you have a crusty, quarrelsome teacher in the school, give him some other class (or else give him a perpetual holiday, which is better) and put the pugilists in charge of the most cheerful Christian you have in the establishment."

[Sound and sensible.]

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

THE INTEGRAL COMMONWEALTH.

A BRIEF REVIEW OF CO-OPERATION IN THE PAST, AND SUGGESTIONS FOR THE FUTURE.

INTRODUCTORY.

HOW to distribute products; how to maintain equity and so reconcile the interests of capitalist and laborer; how enfranchise the people industrially, and so evolve order from the anarchy of general antagonism, emerge from the state of industrial war, and abandon its methods by establishing unity of interests, by founding the adequate society—these questions press with increasing force year by year.

Original poverty has borne like the primal curse upon successive generations, while from the beginning man aspired to a destiny with which poverty is wholly incompatible; and history is but a record of the struggle for enfranchisement from servitudes of every name, and for the amplest endowment of every interest, so that human personality might have free development, and the intent of the Creator find just expression in the full and harmonic activity of the creature.

Wealth increased slowly during wearisome thousands of years, until heat was made to multiply human power myriad-fold. During the long period of poverty men associated principally for aggression and defense; and these associations gradually took organic forms, and became the authoritative Church, the despotic State, with privileged orders of society.

Our earliest knowledge of Egypt reveals an organized State, with its line of kings, a corresponding aristocracy, a sacerdotal order, a servile populace. Even the Israelites, after the exodus and under the theocratic republic of the Mosaic code, had their sacred caste of Levites, who appointed the judges and ruled that people for four hundred years. So Rome, during eight hundred years, whether empire or republic, had its patrician orders, plebeians, and slaves. Upon the fall of the Roman polity there grew up in Eu-

rope the feudal system, which, compared with other states, was a system of extreme decentralization and extreme localization of class power. "Noted warriors were endowed with benefices, or fiefs, of large tracts of land, which they endeavored, and generally successfully, to secure permanently to their families, while governors of provinces similarly contrived to make their power hereditary. Gradually these men assumed titles according to their several functions, and thus arose the numerous classes of dukes, counts, marquises, margraves, barons, etc., which figured so extensively in the middle ages, and laid the foundation of that aristocracy of birth" which gradually ripened into the monarchical system of Europe, with its present four estates of royalty, nobility, priesthood, and commons.

Contemporaneously with growth in the arts was a corresponding intellectual development; a more varied industry implied vested interests and corresponding rights of protection; with increasing wealth a growing community of feeling inspired the people, and gradually, slowly, by more and more commanding combinations, recognitions of right were secured, until finally, in the United States of America, the absolute equality of civil right is the fundamental postulate of the civil polity; theoretically, at least, the people are sovereign—the sole estate; and titled orders and primogeniture are proscribed in the organic law.

These recognitions, however, except in the matter of education, extend only to merely political franchises; they do not yet reach to the realm of industry, do not guarantee that primary franchise, essential to the safety as to the welfare of society, the right of labor and an equitable share of its products. Here, also, the self-assertion of class interests is

extreme; here, too, the old industrial and commercial antagonisms continue and widen with the increasing magnitude of production and exchange.

In all time the dominant classes sought franchises and endowments in obedience to impulses common to humanity. They were not specially endowed with desires or powers differing from those of the mass. Others in their places would have sought the same ends by similar means. Indeed, the perpetual rage of war for possessions and revenue, for securing prerogatives and hedging privileges, are but attempts, lacking equity, nevertheless attempts, to realize the ideal state; and, negatively, are but the common proclamation of an undying hatred of poverty and its disabling limitations.

The ambition of these classes led them into public affairs. This gave them the command of revenues and the appropriation of the spoils of war. Their doings occupy the greater part of historic narrative. Meantime, parallel to the aggressive movement of class rule, there has run through the ages a double counter movement, one branch of it aiming at the foundation of the adequate society, the other looking to the security of class interests only.

In the former, the primitive Christian church stands out as a prominent way-mark. "Take no thought saying what shall we eat, or what shall we drink, or wherewithal shall we be clothed. Seek first the kingdom of God and his righteousness, and all these things shall be added unto you," were the precept and promise. The sentiment of Christian fraternity was the basis of this polity. Affection, the ties of the family, had only incidental recognition, while ambition, the spring of personal interest, was proscribed so far as property was concerned. It was a friendly community, in which all things were held in common, and the teachers and elders ruled by example, persuasion, advice, with the penalty of excommunication in reserve for incorrigible offenders.

The impulse then given has vibrated through the centuries down to the present time. It has expression in the monastic orders of the Romish church; the Moravians still retain some of its forms and spirit, so do the Zoarites, as they are familiarly called, a

German society in Ohio, and the Society of Ebenezer, another German association, and others similar to these. The Shakers completely revive the primitive church, excepting that among the United Brethren, as in the monastery, the friendly exhortation of the elders and bishops has grown into absolute authority, and with the further difference that celibacy is enjoined upon the whole Shaker fraternity as upon the Romish priesthood and monastic orders. The Oneida community also is modeled upon that instituted by the apostles, differing from the celibate life of the Romish hierarchy and Shakers by instituting the "complex marriage," but agreeing with them in maintaining order by authority. This authority, though contrary to the teaching of Christ, which recognizes the common brotherhood of man, seems a necessary means of order in merely communistic societies. All these societies realize abundantly the promised food, raiment, shelter, but in them order is maintained at the cost of personal liberty.

The other branch of this counter movement comprises the guilds of artisans who associated for mutual protection and for undertaking great works. They had their trade secrets, severe apprenticeships, and rigorous examinations; for the guild guaranteed the work of its members. Of these trades' unions, which have continued from remote antiquity under various forms to the present day, Agricola Perdiguer says: "I say, therefore, that the temple, the palaces, the walls of Jerusalem were built by associations of mechanics of the country and of strangers in still greater numbers; that the cities of Palmyra and Balbeck, which contained so many wonders, and the foundation of which is attributed by the Orientalists to Solomon, were also built by the same hands; that all which is seen of great and beautiful, whether in Judea, in Syria, in Babylonia, in Egypt, in Greece, or in Rome, was made by associations of workmen, by companions. . . . It was after the crusades that men saw erected so many cathedrals with lofty spires. . . . It was at this period that Paris, Rouen, Chartres, Saint Quentin, Laon built their colossal cathedrals; that Italy and Germany saw arise their grand edifices; that the East scattered, by means of the companionship and the

monks who protected it, her forms and architectural power over the whole of Europe.

"The German mechanics who built the cathedrals of Cologne and of Strasburg in the thirteenth century were associated. They called themselves Freemasons; the statutes of their association, called freemasonry, were secret. . . . Their object was to form skillful artists by exciting emulation, and to secure the comfort of all the associates. The companionship of France has still the same object. This association of German Freemasons, who cut stone and built cathedrals, exists no longer, but it gave birth to the freemasonry of symbols which has spread in our day over all parts of the world."

Trades' unions, at the present time, are leagues to maintain the rates of wages.

In modern times the beneficiary societies have multiplied and expanded wonderfully. Among these the older and more widely-spread order of Free and Accepted Masons took the lead. Next to these, probably, in numbers and extent of organization, is the Independent Order of Odd Fellows, the Knights of Pythias, Independent Order of Good Samaritans, Sons of Temperance, and a large number of others having like objects, are organized in most of the cities and towns in the United States, and embrace a large constituency. They may be classed as organized charities, intended to ease the friction and mitigate somewhat the anxieties of life. They institute guarantees of aid for the distressed, but do not attempt to institute the conditions of successful life.

The Mormon movement, as it is called, or the association of the Latter Day Saints of Everlasting Life as they originally designated themselves, commands attention not only from its magnitude and the surprising results attained, but also as a curious instance of reflex societary action.

This people have founded a theocratic commonwealth, but instead of adopting the communism of the primitive Christian church, they have, by a singular intuition, reached back to the patriarchate as the type of their social structure. Instead of accepting the civilization and warfare which has grown out of the rivalries of hostile tribes, they strike back to the point where organization should have superseded the authority

of the chieftain, and have taken the step which the tribes failed to take.

Adopting patriarchal polygamy as the foundation of the family, they were driven by destructive persecutions far beyond the bounds of civilized society, and out in the arid valley between the Rocky Mountains and the coast range of the Pacific, they have built a city which might be taken as a model, have established a society which is free of that growing canker of pauperism and of others of the worst features of the cities of civilization; they have established industries which go far toward abolishing the original sin of poverty.

Another modern movement claims consideration here. The Phalansterian revival, beginning in 1843 with the publication of Fourier's expositions of social science, spread like a great tidal wave, and numerous associations sprang up in this country and in Europe having the following comprehensive formula:

Joint Stock Property.
Equitable Distribution of Profits.
Association of Families.
Honors according to Usefulness.
Co-operative Labor.
Mutual Guarantees.
Integral Education.
Unity of Interests.

These were attempts to establish every interest by combinations large enough to give to each interest an adequate organization, and to provide for all wants. The marked success of some of these associations essentially popularized the principle of co-operation, and changed the current of public thought respecting the basis of the adequate society. The example of the Rochdale Equitable Pioneers, a company of weavers who adopt a part of the formula, has been widely imitated to a partial extent by other classes.

Another generation brings us the Grange, the Industrial Brotherhood, the Sovereigns of Industry, and the conventions of the labor unions.

The first three have secret statutes, though their objects are published. They all protest against some special grievances, and to some extent institute certain franchises and

guarantees, particularly social franchises including women, and the economies of whole-sale purchases.

In all of these movements we see the perpetual aspiration of man for freedom, the ceaseless effort to break down the limitations of condition, to burst the bonds of poverty, of authority, of caste, and enjoy the wealth, the liberty, the culture, possible only in the perfect society.

A distinctive feature of the unconscious movement of society to be noted is its partiality. From the dawn of history to the present time, with exceptional efforts to found society on a rational basis, like those noted above, only class interests have taken organic forms. Royalty, nobility, sacerdotal orders associated to establish and maintain their separate interests, their authority, privileges, exemptions, culture, at the cost of the inferior orders; they do this still. The traders, bankers, monopolizers, speculators, the world over, make their combinations for their own exclusive benefit. Even the labor organizations, the Grange inclusive, combine in favor of class interests only. There are, however, signs of impending changes. One large division of the labor interest at least seeks to incorporate under one organization the working men and women of the United States; and the following mode of union is suggested for the consideration of those whom it most concerns:

I.—PREAMBLE.

The powers which have largely controlled human affairs may be classed as follows:

1. The despotic state; 2. The authoritative Church; 3. Privileged orders of society; 4. Corporate monopolies; 5. The money power; 6. Lastly, the people.

The despotisms of State and Church, and the prerogatives of caste society, are theoretically without legal sanction in America, but corporate monopoly and the money power have attained an extraordinary development, so that extraordinary measures are now required to preserve society from impending anarchy through violence, or from decay through gradual absorption into few hands, of surplus products, and of the land itself.

Obviously, society has arrived at an historical epoch, one of those periods out of which grow new departures from old institutions

and usages, emancipations from ancient servitudes and enfranchisement in long deferred rights; or relapse into greater dependence and helplessness.

Have the people at last grown to a just apprehension of their own dues, and of a suitable method of obtaining them?

Certainly, in our day labor is making in its own behalf its first intelligent demand for enfranchisement. Intelligent, because methodical, organized, constructive.

This form of demand is well understood and feared by the parasitic classes, and will be suppressed, if possible, by combinations and by familiar methods, such as effecting divisions and confusing counsels among their opponents, inserting adroit clauses into important laws to secure benefits surreptitiously, ring management of the press, the rostrum, the caucus, the free use of money, intimidation, the suppression of literature and public meetings, and even war is hinted at.

These tactics are also understood by the laboring classes; and, apparently, the commanding issue of to-day is a struggle for supremacy between producers and combined monopolies; between the creators of wealth and those who do not create, but who, by large combinations and ingenious devices, absorb more and more of the wealth produced, especially that central monopoly, the grand focus of all monopolies, the money power.

This power is not merely the bankocracy of the United States, which, influential as it may be in commerce, industry, and the halls of legislation, is nevertheless but one subordinate constituent of that universal power, that "international imperialism" which has its chief center in London, its co-ordinates in every nation, its branches in every principal city in Christendom, its correspondents wherever property is bought and sold, which controls the money of the world through the control of gold, and so determines the rates of interest and the prices of money, of products, and of labor; which excites industry into full activity by copious loans, and, at pleasure, collapses every interest by calling gold, or attacking credit; which fattens upon public debt and private misfortune, for it more than doubles the volume of debt and the cost of railways by discounting govern-

ment and railway bonds, so that in many cases less than fifty per cent. of loans goes to legitimate use; buys private property at panic prices and real estat. at foreclosure sales; which dominates capinets, dictates diplomacy, shapes legislation, nominates executives, inserts its plank in party platforms, interferes in elections, forms coalitions, instructs finance committees, procures boards-of-trade resolutions and memorials, inspires Presidential vetoes, manufactures public opinion through the press and public meetings, lobbies in every legislature on the globe, levies double and three-fold tributes upon the laborer, producer, manufacturer, carrier, consumer in all lands, and, withal, is irresponsible.

A single illustrative fact may be suggestive: August Belmont, American representative of the Rothschilds, was for many years Chairman of the National Executive Committee of the Democratic Party.

Recent developments have alarmed this omnipresent power, and its varied resources will be freely used to maintain its prerogatives and perpetuate its control of all interests. On the other side are the useful classes of every name, and their first necessity is ORGANIZATION.

Not merely organized opposition, for this would only methodically institute a war of classes, each class striving for its own aggrandizement, with slight reference to the general welfare.

Nor yet merely local and partial organizations like those of the grange and other industrial and commercial unions; but special combinations like these, embracing a wider scope of interests; and, superadded to these, combined general organization, comprehending the organization of labor as well as of commerce and the State.

Has the time arrived for instituting

THE INTEGRAL COMMONWEALTH,

which by its very constitution will exclude the predatory classes by rendering their functions obsolete?

Is it now possible to initiate a combined order which will equalize populations, industries, markets, adequately endow every interest, guarantee home, society, education, employment?

Demands tending toward these ends are

now made by influential parties, and seem worthy of present consideration.

Believing that in addition to the already great accomplishments in this direction, especially by the Patrons of Husbandry and some other industrial unions, still further steps may be taken, which, while not interfering with present organizations, will, on the contrary, strengthen all such by making them more complete in themselves, and at the same time give to each the added power of a larger unity.

To this end, and as preliminary to a more compact and comprehensive organization, in which every interest shall have direct representation in legislation, administration, jurisprudence, education, and the management of affairs, the following outline constitution is suggested; assuming that each interest will maintain its separate organization and public conventions as at present, but, at the same time, each interest to institute additional public or commonwealth degrees, and so have joint or commonwealth councils for the consideration and administration of common interests, as well as separate orders for the care of special interests.

If the general plan proposed, or some similar one, be approved, amendments will be required to the constitutions of the industrial orders uniting under the general organization, providing for the institution of the commonwealth degrees indicated, and for the mode of conferring them.

SOVEREIGNTY.

At last, the people of the commonwealth are the admitted sovereign power.

The people, recognizing the equality of civil right, representative government, personal liberty, they properly make and amend constitutions, determine franchises, enact laws, provide for the common welfare, levy taxes, organize labor, society, the commonwealth.

II.—ORGANIZATION.

First Degree.—Primary organization, subordinate grange, or labor union of whatever name. These to be extended and made more complete, especially by instituting: 1. Bureau of Industry; 2. Bureau of Exchange and Transportation; 3. Bureau of Domestic and Social Economy; 4. Bureau of Education; 5. Bureau of Justice; 6. Bureau of Health.

Second Degree.—Joint industrial councils or commonwealth degree. County or district councils constituted of: 1. Masters and Matrons of the subordinate granges, and the like representatives of other primary labor unions of the county or district; 2. Delegates at large, elected from each primary.

Councils of this degree to institute: 1. Bureau of Organization; 2. Bureau of Industry; 3. Bureau of Exchange and Transportation; 4. Bureau of Finance; 5. Bureau of Education; 6. Bureau of Domestic and Social Economy; 7. Bureau of Justice; 8. Bureau of Health.

Third Degree.—State Industrial Senate, constituted of: 1. Chiefs of county or district councils, including matrons; 2. Delegates at large for each county or district, to be elected by popular vote in the primary organizations.

The Senate to institute: 1. Bureau of Organization; 2. Bureau of Industry; 3. Bureau of Exchange and Transportation; 4. Bureau of Finance; 5. Bureau of Education; 6. Bureau of Health; 7. Bureau of Justice; 8. Bureau of State; 9. Executive Department, constituted of: 1. Chiefs of Bureaux; 2. Chief Executive, constituted of Governor and Matron, and elected by popular vote in the primaries.

Fourth Degree.—Senate of the Commonwealth, constituted of: . . . Senators and Matrons from each State and Territory, one-half of whom to be elected by popular vote in the primaries.

The Senate to institute: 1. Bureau of Organization; 2. Bureau of Industry; 3. Bureau of Exchange and Transportation; 4. Bureau of Finance and Currency; 5. Bureau of Education; 6. Bureau of Political Economy; 7. Bureau of Justice; 8. Bureau of State; 9. Executive Department, constituted of: 1. Chiefs of Bureaux; 2. Chief Executive, constituted of President and Matron, and elected by popular vote in the primaries.

III.—FUNCTIONS.

1. Officers—Similar to those in other deliberative bodies, but to be specifically defined.

2. *First Degree*—Primaries. 1. Bureau of Industry: To gain and diffuse information respecting industries, productions, and employment; report local resources and wants;

promote diversification of industry, co-operative labor, and aid in procuring employment for those needing employment.

3. Bureau of Justice: To promote the adjustment of personal differences by the parties in interest. This failing, then to promote settlement by arbitration. This failing, then to decide, taking into consideration the original intention of the parties in the matter, as well as the equities of the case.

4. Bureau of Health: To supervise sanitary regulations, especially those relating to cleanliness, ventilation, diet, regimen, overwork, etc.

SENATE OF THE COMMONWEALTH.

I. Bureau of Organization, charged with the care of: 1. Elaborating the Constitution, providing more specifically for uniform conditions of membership; 2. Mode of constituting the several bureaux in all degrees, and the number in each bureau, having special regard to an equitable representation of every interest; 3. The number of primaries constituting a district or State organization; 4. Times of elections and terms of office; 5. Order of business; 6. Promote the expansion of the Order by means of literature, lectures, and systematic visitation throughout the Order by suitable officers; 7. Ascertaining the qualifications of members for important or special functions, and reporting thereof to the proper body.

II. Bureau of Industry, to provide for: 1. The collection of information concerning production, markets, the supply and demand of labor, and the prices of land products and labor; 2. Facilitating the diversification of industrial pursuits, especially by procuring, when and where practicable, the establishment of manufactures and the mechanic arts, so as to attain equilibrium in production and population, and make home markets; 3. An equitable system of apprenticeship; 4. For regulating the hours of labor; 5. Promoting the system of joint endowment and co-operative labor in industrial enterprises; 6. The guarantee of employment.

III. Bureau of Exchange and Transportation, to provide for: 1. A system of equivalent exchange—that is, cash trade or its equivalent, and the consequent abolition of the credit system and its inherent bankruptcy; 2. The largest practicable combinations

in purchases to secure wholesale economies; 3. The middleman, or exchanger, when needful, being the paid agent of owners or purchasers of property, and not the purchaser and seller of goods for his own account, so that exchange may become a social function, and cease to be a speculation; 4. Collecting and reporting information respecting markets, prices, and supply and demand of products, rates of freight and passage.

IV. Bureau of Finance and Currency, to be charged with: 1. The care of the public funds; 2. The issue and management of the public currency. The chief to be the Treasurer of the Commonwealth, and the members to be jointly responsible for the safe-keeping and lawful disbursement of the public funds.

V. Bureau of Education, to have the care of educational interests, and to consider and report plans of industrial education, whereby our youth may become accomplished in the arts of life.

VI. Bureau of Political Economy, charged with the consideration and promulgation of doctrines involving Congressional legislation, especially: 1. A system of equitable finance and currency; 2. A system of transportation and internal improvements; 3. A system of savings banks and loan associations; 4. A system of life and fire insurance; 5. A system of labor insurance or guaranty of employment.

VII. Bureau of Justice will be a court of appeals in each degree, and decide causes: 1. In the primary organizations, if conciliation and arbitration fail; 2. In the district councils in causes between primary organizations, or within them in cases of disputed jurisdiction; 3. In the State Senate in causes between district councils, and within them in cases of disputed jurisdiction; 4. In the Senate of the Commonwealth in causes between States, and within States in cases of disputed jurisdiction; 5. In the construction of the Constitution and laws.

VIII. Bureau of State: Official organ of the executive in Commonwealth, inter-state, and foreign affairs.

IX. Executive Department: Organ of the Commonwealth in all public affairs.

GENERAL PROVISIONS.

1. Bureaux in the several degrees to per-

form like offices in each degree to those of the corresponding bureau in the Senate of the Commonwealth, except as otherwise defined.

2. The Constitution and all laws to be referred to the primaries for final sanction.

PRELIMINARY MEASURES.

If the general plan and purpose of the foregoing outline be approved by the National Grange and other labor unions, then these bodies to appoint say five or more delegates to act in common in definitely instituting the Order of the Commonwealth; providing at first and temporarily for selecting suitable persons for the first Bureau of Organization, to whom will be committed the elaboration of the Constitution in detail.

Upon the report of this bureau to the first delegation, measures would be taken to appoint a larger body of delegates to consider the Constitution and adopt so much of it as might appear to be suitable.

Then the needful amendments to the constitutions of the several orders uniting in the Order of the Commonwealth could be made, the requisite degrees be conferred, and the order definitely instituted.

NOTES.

Contrary to prevailing custom in large States, it will be observed that provision is made for but a single house of legislation for the State and for the nation.

Good reasons for single chambers may be found in the following provisions:

1. Women participate in legislation, and their more ready intuition may be expected to strike the key-note of measures by shorter process than the ordinary intellection of men.

2. All laws are to be referred to the primary organizations for final sanction.

An observation is required in explanation of an important feature introduced into the Constitution here suggested, namely, that of recurring popular representation throughout the Order.

The object of this provision is to maintain popular representation, combined with a stricter method of order than is compatible with merely popular representation, and at the same time to avoid creating a hierarchy, measurably separate from, and measurably irresponsible to, the people.

3. A further suggestion may be made with

reference to a system of promotions for civil service from the primary organizations throughout the Order, as in the hierarchal promotion by masterships.

This is interfered with by the method of electing senators by the State Senate.

An additional reason for this is, that by a strictly hierarchal system the chief executive of the State would, *ex officio*, be a member of the National Senate, and owe service in two places at the same time.

4. The Bureau of Justice provides courts of competent jurisdiction throughout the Order, meeting equally the requirements of individuals and States, so that parties in a

Texas, a Louisiana, or an Arkansas may substantiate their claims by proofs, and abide a judicial decree, the same as private persons in a primary organization.

5. The powers at present conferred upon the executive are a direct means of promoting and maintaining class interests. They foster a race of professional politicians. They are the foundation of party organizations, and a principal reason of the demoralization of public life.

In the Constitution here suggested, therefore, the Executive is a department or council, and the chiefs merely preside and promulgate the decisions of the council.

CHARLES SEARS.

OUR NEGRO POPULATION.

THE future of the negro is a matter upon which every thinking mind must have thought more or less, and there are few who have not formed some sort of a theory about it.

There were, three years ago, in the United States no less than 4,880,009 colored persons, mostly negroes, with a few mulattoes, quadroons, octoroons, and so on. No humane mind can be indifferent to the fate of such a mass of human beings. Mere theorizing is altogether unsatisfactory, because, from different stand-points, the results are often contradictory. History does not furnish an exact parallel. One theorist sees in these five million blacks "a noble and puissant nation rousing herself like a strong man after sleep," rising to rival the white races in all the domains of art, science, government, and civilization, while another theorist sees nothing but decay and decadence, and contemplates those so-called children of Ham, reading—as Lo is unquestionably doing—their doom in the setting sun. And yet a third dreams of amalgamation and a hybrid civilization.

It is idle, in the face of all history, to imagine the coexistence of two races, as unlike as these two, except in the relation of competition—of rivalry, at least—if not of utter antagonism. Recently seen results of so-called reconstruction indicate bitter hostility in the future of the two races in the South. Amalgamation, I take it, is impossible; phys-

iologically first, and that is sufficient, but also ethnologically and morally. We shall have to wait for the census of 1880 for general facts upon the relative progress of the two races as shown in vital statistics, and these will be looked for with intense interest; but, meanwhile, there are particular facts, more or less representative in their character, which may be of use in throwing a measure of light upon the question. I propose to take a few such facts, and to consider their bearing upon the future of the negro race in the South. The sources from which I take them are two—the *Annual Report of the City Registrar* of Charleston, South Carolina, for the year 1873, and the *Ninth Census, 1870, of the United States*, mainly the former.

FIRST. I present a table of the comparative mortality in Charleston for the last four years. The calculations are all based on the official census of 1870, at which time the population of that city was 48,956, of which 22,145 were white, and 26,811 black. The proportion, the important matter, remains probably very much the same.

TABLE, showing the comparative mortality in Charleston, S. C., for the last four years.

Years.	Races.	Deaths.	Proportion : One in—	Per Cent. of Population.
1870	W.	539	41.09	2.42
	B.	1,075	24.94	4.01
1871	W.	714	31.02	3.22
	B.	956	28.05	3.57
1872	W.	521	40.59	2.35
	B.	1,036	25.88	3.86
1873	W.	507	43.68	2.29
	B.	1,009	26.63	3.76
4 Years	W.	570	38.85	2.57
	B.	1,019	26.33	3.80

The first column, it will be observed, gives the year; the second, the races, white and black; the third, the number of deaths; the fourth, the proportionate mortality—the annual deaths compared with the populations; and the fifth, the rate per cent. of deaths on the basis of population. These figures show—

1. That the proportion of deaths in 1873 is, in the aggregate, one to 32.29.
2. That the average proportion for four years is, of the whites, one to 38.85, and of the blacks, one to 26.31.
3. That the deaths of whites are fewer than of the blacks, in the ratio of 2.57 to 3.80 per cent.
4. That the average of death for the four years gives 580 whites and 1,019 blacks.
5. That the average difference between the deaths of the two races is 449 more blacks than whites a year. The difference in the two populations in the city is 4,666. At this rate, the increase being exactly the same, the difference will disappear in about ten years—that is, about 1880.
6. That the per cent. of population dying each year, for three out of the four years, was less than the average—the exceptional year being 1871.
7. That the per cent. of deaths of the whites, in those three regular years, has steadily decreased, from 2.43 to 2.35, to 2.29.

SECOND. If, going to the Registrar's *Report* again, we take the ages of the dead—I select that year because it is the latest—of 1873, there will be found a suggestive difference. The aggregate number of deaths is 1,516, of which 507 are white and 1,009 black. Those under twenty years old being classed as children, and those over as adults, we have an exhibit like this:

TABLE.			
Races.	Ages.	Deaths.	Per Cent.
W.	Children	191	38
"	Adults	316	62
B.	Children	498	49
"	Adults	511	51

Here we see that the per cent. of deaths of the white children to that of the adults is 38 to 62—very little over one-third being children—while the per cent. of deaths of the black children to that of the adults is 49 to 51—almost exactly half being children. That is, the mortality among the black children is much greater than among the white.

This disparity will tell upon the increase by and by.

THIRD. If we note the most fatal diseases in these mortuary reports, we find that consumption has destroyed 22 whites and 60 blacks; dropsy, 1 white and 40 blacks; trismus nascentium, 39, all black; diarrhea, 2 white and 23 black; various kinds of fever, 7 white and 11 black; small-pox, 2 white and 16 black; and cholera infantum, 1 white and 9 black.

FOURTH. Divided by sex, we find the 1,516 deaths to stand thus: Whites, males 264 and females 243, showing fewer of the latter; blacks, males 502 and females 507, showing more of the latter. This difference also will tell upon future increase by and by, and in the same direction as will the disparity in the ages mentioned above.

FIFTH. According to the United States census of 1870, the population of South Carolina—exclusive of Indians and Chinese, which are neither white nor black—is 705,481, of which 289,667 were white and 415,814 black. That is, 42 per cent. were white and 58 per cent. black. The deaths in the State for that year were 7,231, of which 2,321 were white and 4,910 black. That is, 32 per cent. of the deaths were whites and 68 per cent. blacks. Here—throughout the State, that is to say—the mortality of the whites is 0.801 per cent. of their whole number, and that of the blacks is 1.180 per cent. That is, the proportions of deaths to population throughout the State are exactly those within the city. Expressed differently—see the average per cent. given in the first table above—2.57:3.80::0.801:1.18, from which we see that the death-rate of the city of Charleston is exactly that of the State of South Carolina.

SIXTH. The number of mulattoes in South Carolina decreased between 1860 and 1870 from 38,314 to 27,829. This indicates that amalgamation is not a successful experiment, so far, at least, as increasing the population goes.

SEVENTH. As to increase of the races the figures are less definite, migration introducing modifications. This general fact is patent, however, that the increase of blacks, where they abound, is far below their average increase, and that the average increase is

far less than that of the whites. Between 1860 and 1870 the aggregate increase in the United States was 22.22 per cent. The increase of whites was 24.39 per cent., while that of the blacks was 9.21 per cent. In densely populated regions the blacks increased less than their little general average. In Louisiana the increase was only 3.95 per

cent., in Mississippi 1.55 per cent., and in South Carolina 0.85 per cent. These figures must be considered, remembering the element of migration. The general effects seem to be that the blacks are increasing less than formerly, and are scattering from the dense centers, moving westward and gulfward.

JAS. WOOD DAVIDSON.



JOHN ROACH, THE AMERICAN SHIP-BUILDER.

MR. ROACH has been known in the walks of iron industry for many years, and has won his reputation by sheer hard work and persevering energy. He is worthy of notice at this time, especially on account

of his endeavors to restore to the American ship-building interest the vigor which it possessed before the late war—endeavors which already appear destined to reap their merited fruitage of success.

The portrait of Mr. Roach indicates the possession on his part of strength, health, endurance, and power. That broad, deep chest, that strong face and large, wide brain give one an idea of momentum, energy, and power in the direction of executiveness. The head is not high in proportion to its length and breadth, and we infer that intellectual development and force of character are the predominant elements in his nature. Sympathy, sentiment, imagination, spirituality are not his strong traits. The length of the head, from the opening of the ear forward, is great, and the forehead is very massive, showing intellectual grip and vigor, and the ability to comprehend practical subjects from beginning to end. In working out his purpose he can be master of the situation, and when he has the right to control he takes the control, and expects his authority to be thoroughly respected.

Such an intellectual forehead reminds one of a subsoil plow, which follows the common plow, and turns its furrows under, leaving nothing in sight but its own work. We do not see in that head as much brilliancy as strength. The large Causality, located in the upper part of the forehead, in a line directly above each eye, shows planning, originating, comprehending capacity. The breadth of the head at the temples evinces mechanical ability of the first order, and, associated with his cast of intellect, it would take the devising, planning direction, rather than that of manipulation.

The large organ of imitation, which gives a level appearance to the top-head, enables him to copy and adapt readily whatever he meets with in the world of thought or work. He learns by experience and observation, but his characteristic force is originality. His perceptive organs, situated across the brow, are well developed, especially those of Form, Size, Weight, and Order. He has also good Calculation and a mathematical mind.

The breadth of the head between the ears, and a little backward of them, shows Destructiveness, which gives thoroughness, efficiency, and some severity to his character, while he has enough Combativeness to make him courageous and plucky. The physiognomy indicates strong social qualities—the tendency to make friends, to be fond of

children and pets, and to feel at home in the social circle. His Language is sufficient to make him a good talker, and when he talks he says something, by no means multiplying words, but driving right home to the point.

His Mirthfulness is large in the portrait, and it seems to us that in the circle of his friends, in the easy hours of leisure, he is one of the most jovial of men. He is not a proud, aristocratic sort of man, but one of those whom poor men can approach with confidence. In general, his nature is open, earnest, positive, executive, and thoughtful; full of originality and of mechanical and business ability.

From a sketch of his career, recently published in *Harper's Weekly*, we extract the substance of the following interesting notes: He was born in Ireland. When he was but twelve years his father died, leaving him to make his way in the world as best he might. At the age of sixteen he was induced to come to this country on the advice of an uncle then residing in New York city; but on arriving here he learned that his relative had removed to Texas, which seemed at that time a great deal further off than now. Without friends, and almost penniless, he resolved to rely on himself, and seek employment at anything he could find, in order to obtain the means to return to Ireland. But work was scarce, and after remaining several days in New York he set out for a place in New Jersey, where he learned a man was living who formerly worked for his father.

He crossed the ferry with a few shillings in his pocket, and after traveling on foot about sixty miles, found the person he was in search of at a place known as the Howell Works, where a blast-furnace belonging to Mr. James P. Allaire was in operation. Here he obtained work of a miscellaneous character, connected with making iron from the ore and coal from wood, at seven dollars per month and his board. There was also a department in these works where a variety of rough castings were made directly from the blast-furnace without remelting, the labor for making them being paid for by the piece. The custom existed of requiring fifty dollars for an opportunity to learn this branch of the business. If unsuccessful, no pay was received, and the fifty dollars forfeited. At

the end of the first year he had saved the requisite amount, paid it, and commenced in this department, succeeding as well as he had anticipated, while many others failed. By industry, long hours, and rigid economy, at the end of three years he had saved upward of fifteen hundred dollars, when the furnaces stopped, and all work was suspended.

There was no savings-bank in that section of country at that time, and his savings were all in Mr. Allaire's hands. He drew from him a small amount, and went West to purchase some land, with the understanding that when his arrangements were made and the land purchased, the balance was to be remitted to him.

In the mean time, however, Mr. Allaire failed, and John Roach's savings were included. The young man was again without money, and was compelled to work on the canals and railroads then constructing in that part of the country, in order to return to New York. On his arrival in this city he went to the Allaire Works, was hired, and commenced learning to make castings for marine engines and ship-work at one dollar per day. While learning this branch of the business, he also gave much attention to the other branches, and gathered information from every source within his reach. Here he worked for many years. He had married while receiving a low salary, and even when this was increased, he found it barely sufficient to support his family; the hard toil and constant effort to maintain the struggle for support affected his health, and he longed to establish a business of his own. By occasional work at over-hours he succeeded in saving a hundred dollars, which, with three partners who had each the same amount, he invested in a foundry. His partners soon became discouraged and sold out to him, and he thus became sole proprietor of the establishment. He did so well in his business that in four years he saved \$30,000. With this capital he purchased the ground on which his foundry stood, erected better buildings, procured new and improved appliances, and looked forward to a still more prosperous career. But soon afterward his foundry was entirely destroyed by the explosion of a boiler; he was unable to recover the insurance, and after paying his debts

found himself once more without a dollar he could call his own.

Undiscouraged by this heavy misfortune, he at once repaired his shop for temporary use, and started again, with no assistance but a clear head and good credit. He was soon able to rebuild his foundry, and gradually increase its capacity. Here the engines of the Dunderberg, the Bristol, and Providence were constructed, the largest ever built in this country.

After the war, the American ship-building interest was so depressed that many of the large firms engaged in that business were disposed to abandon it. Mr. Roach purchased the Morgan Iron-works, the Neptune, the Franklin Forge, and the Allaire Works, where he had served his time, and concentrated the best machinery of each at the Morgan Works. In November, 1871, he bought of Messrs. Rainey & Sons their large ship-yards at Chester, Pennsylvania, as a part of his avowed purpose to restore American shipping to the place it held before the war had crippled our commerce and driven all ship-building to the banks of the Clyde. During the past two years the amount of shipping built in the Chester yards is more than 40,000 tons. His latest triumphs are the magnificent steamers *City of Peking* and the *City of Tokio*, built for the Pacific Mail Steamship Company. Mr. Roach asserts that he can build a better ship for the same money than can be built in any European ship-yard, and he declares that if others will go into the fight with him, he will make the banks of the Delaware the great ship-building yard of the whole world.

TALL BUILDINGS.—The many tall buildings recently erected and being erected in New York impress the observer that there is a spirit of rivalry afloat, and which possesses the brains of architects and capitalists with respect to the elevation of new storehouses and offices. Some structures have been run up to so great a height that the thoughtful passer-by feels apprehensive of his security while in their vicinity. Down town there is the spire of Trinity Church, which is 284 feet high—pretty well up in the air for a church steeple, but think of a business office like that of the Western Union Telegraph Co., whose cupola or tower

is 226 feet from the pavement. The Brooklyn bridge towers will be 222 feet high; the Post-Office dome 195 feet; Equitable Life Insurance building, when its new stories are added, 175 feet; the shot tower 220 feet. Then there are

the Mutual Life Insurance Company's office, the *Tribune* office, the Park Bank, the new *Herald* building, all of which mount up to dizzy heights. It seems to us that this rage for getting up in the air is by no means to be commended.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall!
Thou art the nurse of virtue.

BOTH SIDES.

A MAN in his carriage was riding along,
A gayly dressed wife by his side;
In satin and laces she looked like the queen,
And he like a king in his pride.

A wood-sawyer stood on the street as they passed;
The carriage and couple he eyed;
And said, as he worked with his saw on a log,
"I wish I was rich, and could ride."

The man in the carriage remarked to his wife,
"One thing I would give if I could—
I'd give all my wealth for the strength and the
Of the man who is sawing that wood." [health

A pretty young maid with a bundle of work,
Whose face, as the morning was fair,

Went tripping along with a smile of delight,
While humming a love-breathing air.

She looked on the carriage; the lady she saw,
Arrayed in apparel so fine;
And said, in a whisper, "I wish from my heart
Those silks and laces were mine."

The lady looked out on the maid as she passed,
So fair in her calico dress,
And said, "I'd relinquish position and wealth
Her beauty and youth to possess."

Thus it is in the world, whatever our lot,
Our minds and our time we employ
In longing and sighing for what we have not,
Ungrateful for what we enjoy.

HOME POLITENESS.

ETIQUETTE abroad, with its thousand forms, its manifold details, and its innumerable ceremonies, is often discussed and enlarged upon. If Lord Chesterfield, Count D'Orsay, and kindred authorities are to be believed, it is the great essential end and aim of life. While in a minor degree admitting its importance, it is impossible to be oblivious to the fact that it is largely subordinate to and dependent upon the exercise of politeness at home. If the influence of home be potent in the affairs of religion, morals, and education, is it not equally powerful in the formation of manners and deportment? Home is the great training-school of life; and the child who is daily taught from parental lips that the great secret of true politeness is consideration for the feelings of others, and that the most solid basis of all etiquette is the golden rule, will, generally,

in mature years, be courteous and refined; and, though ignorant of many forms, yet win both hearts and hopes. The children of the cultured widow or of the intelligent merchant, who has been compelled by adverse circumstance to leave the refined circle of the town and retire to some quiet country village, command the attention of their neighbors by their superior address. But not merely as a preparation for society or public life is politeness at home to be practiced, but chiefly that home may be made what it should be, the sweetest and happiest spot on earth—one to which its members shall, in the after years of separation, look back with fondest memories.

Could we visit those homes which family feuds have made wretched or desolate, and become acquainted with the kinsmen who cherish for each other a life-long hatred, we

should be surprised to find how often the omission of little courtesies or the commission of thoughtless incivilities had at first created coldness or distrust. "Take heed to the foxes, the little foxes which spoil the tender vines," is as applicable to etiquette as to other matters.

It is to be regretted that while society commands and business compels that rudeness be banished and harshness and querulousness be repressed, yet, in the comparative retirement of home, greater freedom is allowed; and there some "Lords of Creation" display their tyranny, while the amiable belles of society who, when bent on conquests, never forget that "A low, soft voice is an excellent thing in woman," yet here, on the slightest provocation, speak in a tone sufficient to arouse the seven sleepers, while their juniors are allowed the largest license; and, in short, home is treated somewhat as we do rainy days, when we sally out in our worst habiliments and feel in our surliest mood.

Does the charming Lillian Matilda ever remember, the honeymoon having passed, as she languidly takes her place at the breakfast-table, with her hair in curl papers, crumpled collar, and morning-robe, looking as though washing was included among the lost arts, the time when hysterics would have ensued should her intended have chanced to find her in such dishabille?

Does she imagine, as, with petty gossip, continuous murmuring, or angry words about trifles, she taxes her husband's patience, that human affection can withstand all shocks or love and respect never be destroyed? It certainly never occurs to her, as, with loftiest disdain, she addresses her servants, pays no attention to their wants or sorrows, and looks upon them merely as beings permitted to live merely to serve her, that "Of one blood God created all the nations of the earth," and that "all we are brethren." Nor does Adolphus Charles remember the rules laid down in courting days, as, "company being absent," he leisurely smokes his cigar in the cosy parlor and labors under the delusion that carpets were woven for spittoons.

It is manifestly unknown to him that mantel-pieces were not intended for foot-stools, neither were boot-jacks originally designed for parlor ornaments.

He is disposed to forget that loud yawning is not considered essential to good breeding; and that magnanimously to surrender your favorite newspaper or magazine to some relative is a cardinal virtue. And it must be confessed that when unkindly declaring that his wife's new bonnet is "a perfect fright" and her taste incomparably inferior to Mrs. Jones'—her coffee denominated "nauseating," and her favorite pudding "perfectly disgusting," his opinions have changed, although she may have really improved in dress and household management since the time when all she wore was declared "lovely" and her cooking "irresistible."

Would he speak in the same tone to an esteemed lady acquaintance?

Did he not, when the guest of Mrs. Brown, eat her indigestible beefsteak and sour bread without a murmur, and was he ever known to come in when the principal meal was half over, after being delayed for half an hour, with only "Don't bother" for an apology and a toothpick for a companion? As for the olive branches around their table, if allowed to eat soup with a gusto which would be pardonable only in the Cannibal Islands, to make a promiscuous selection of any thing they may fancy, upsetting dishes and fruit-holders in their haste; to eat with knives instead of forks; throw bones on the table-cloth and crumbs on the floor; to interrupt the most serious conversation with noisy comments, and leave the table when and how they please; is it to be expected that they will contribute to the comfort of the parental repast or maintain the honor of the family when away from home? On the other hand, have parents any right to assume that children are nonentities, and administer for trifling causes those severe reproofs which tend to destroy self-respect or inculcate cunning and deception?

Have they, too, not a right to be treated with respect? Thanked for their services, their wishes consulted, and their little pleasures not unnecessarily jostled aside as of no account? Would not such a course make them more truly polite to others, more manly and self-relying?

The young misses and ladies whose grammatical inaccuracies and slang phrases, such as "My gracious!" "Oh, goodness!" are al-

lowed to escape unnoticed at home, must submit to be severely criticized in good society, or else be doomed to constant anxiety in their efforts to play propriety.

The young gentleman who lolls in the easy chair, and invariably takes the cosiest corner by the fireside; neglects to take off his squeaking boots when visiting the sick-room of some suffering relative, or to accompany his sisters once in three months to the concert or lecture which they are longing to hear, will never be a perfect gentleman unless some millennial wave rolls over him. As for the poor relations who inhabit the attic chambers, mend the home linen, and serve as a kind of "pin-cushion" into which all the family annoyances are thrust—what plea shall we offer for them? or what precept enforce except to exhort that "patience have its perfect work?"

Be polite at home, grieve not the hearts which love you by coarse or stinging words, let sarcasms be avoided, and contradictions and personal comparisons but rarely indulged in. Let no slander or ridicule of absent ones poison your home circle. The placing of a chair, the opening of a door, or the gentle

closing of the same, the shading a window, or giving up some favorite nook for the accommodation or use of another, are not matters too small to be attended to. Neither are promptness and punctuality, order and neatness. Remembering that "familiarity breeds contempt;" too frequent visits to the rooms of others, even though they be of the same family and sex, will not be practiced; neither in ordinary cases will their wardrobes be rummaged nor their letters inspected on the plea that it is all in the family. There is a sacredness about individuality which no family ties should venture to disregard.

And so in reference to personal opinions; why should difference, wherein no question of morality is concerned, be allowed to disturb the peace of the household? Has not each a right to think for himself? Does an angry discussion on religious or social problems often lead to the conviction that one party is in error? How often, indeed, does it tend to heartburning and estrangement? If vehement controversies are out of place in society they are as much so in the domains of home. Let our lives be our strongest arguments and our actions be our creed. C. I. A.

THE CUCKOO.

THIS bird is familiar enough by name to the reader, yet may have been seen by very few of those who read this, on account of its shy and reserved habits. There are many species of the Cuckoo, more than forty in the Old World and America having been classified. The common English cuckoo (*Cuculus canorus*) is the best known and most interesting species. In this bird the corners of the mouth and eyelids, and the inside of the mouth are of an orange color; the plumage of the head, neck, breast, and upper parts is of a deep bluish gray; the under feathers are white with black bars, the quills are blackish gray, the inner webs having transverse white bars; the tail is darker, approaching black at the end, and often there is a green gloss pervading it, and the tips of the feathers are white, each feather being marked also with triangular white spots; the feet are yellow, and the bill black. The length of the bird

is about fourteen inches, and its breadth of wing, when spread, about twenty-five inches. Being migratory in habit, its appearance in England and Germany early in the year is hailed as the indication of the return of the sunny skies and mellow breezes of spring. It usually travels northward from the warm latitudes of Europe in April, and returns in August or September. Its habitats are either in wild or cultivated regions, but where the foliage is dense, and affords opportunity for concealment.

The peculiar relations of the male and female cuckoos, and their treatment of the young, have made them subjects of much consideration with naturalists. There is no pairing or continued attachment of the sexes, and the female deposits its eggs in the nests of birds of other species, usually one egg in a nest, and leaves them to be hatched, and the young ones cared for, by the foster mother. But the care of that foster mother

is often rewarded by the murder of her own offspring, as the young cuckoo endeavors, as soon as it has acquired strength and size, to push out any eggs or young birds that may be in the nest with it. As the parent cuckoo selects the nest of a bird smaller than itself, as the finch, sparrow, lark, for the purpose of having its kind propagated, it would appear that this method of infant murder was instinctive. From this habit, the German

end of the three outermost, the fourth being white on the outer web, and the smaller feathers having inner webs of brownish orange. The under parts of the bird are grayish white. As its notes resemble the word "cow, cow," it is known in many districts as the cow bird. It is not abundant anywhere in the United States, yet may be found in almost every part during the warm seasons of the year.



THE AMERICAN CUCKOO.

saying, "as ungrateful as a cuckoo," has been derived.

The cuckoo has a similar name in nearly all European languages, which is closely allied to its peculiar song. The most generally known of the American cuckoos is a somewhat smaller bird than the European; its bill is yellow, and the general color of the upper parts is light greenish brown; the tail feathers, excepting the two middle ones, are black with a broad white space at the

Neither in Europe nor in America is the cuckoo a pet bird, its habits unfitting it for domestication, or, perhaps, its well-known domestic peculiarities do not give it that tender consideration which is felt toward other birds of more "regular" practices.

HOW TO PUT CHILDREN TO BED.—A mother says: I have a little girl two years old; she is a little nervous, but is very healthy and strong; how must I manage to overcome this matter?

Is it a good plan to put her in her crib at night and shut the door and leave her alone? She cries some nights for some time before sleeping; then, again, she goes directly to sleep.

[ANS.—Talk to her kindly, lovingly, and assure her all will be well. Then put her to bed, with a kiss and a prayer, and she will be quiet

—a little generalship may be exercised in advance. The child may be given some little task to perform, or play, in which the exercise will make her comfortably tired, *then* she will be glad to retire for rest and sleep—use your *judgment*. Study the character of the child, and you will soon learn how to manage it.]

THE HUSBAND'S MISTAKE.

THE ceremony was over, and two loving hearts were joined in a bond that naught but death should break. So said the marriage vow, and to Herman and Mary that vow was the most sweet and sacred that ever bound two loving hearts together.

In blissful solemnity they received the congratulations of friends, turning now and then to each other for a mutual glance, eloquent with their hearts' happiness.

It was beautiful to see them in this their marriage hour. They seemed truly worthy of each other, both handsome, brilliant, and refined, and loving each other devotedly. Friends looked upon them as a model pair, and entertained high hopes for their future. The short wedding journey over, Herman Wickford took his young bride to the home he had prepared for her, a simple cottage with tasteful furnishings, and here their married life began.

Years passed away; children were given them; Herman prospered in his business, and thought he was growing wealthy, but the perfect happiness which he and Mary had anticipated did not come. Instead of being united by marriage into an harmonious one, they found that they were still two, with different tastes and views, different elements of character, and sharp corners in their dispositions, of which they were scarcely aware themselves until they came into collision with each other.

No serious trouble had ever occurred between them, but little things were constantly coming up to vex them, often causing sharp words or sarcasms, for, being young and inexperienced at the time of their marriage, they did not know how to meet in the true spirit the unavoidable difficulties that must arise from so close a union. They were proud, too, and instead of acknowledging

their shortcomings to each other, and talking them over in the spirit of love and sincerity, they would let them pass by and pretend that they were forgotten, but they never were.

Another drop of bitterness had crept into their hearts. Mary, who was very beautiful at the time of her marriage, was fading and losing the charms of her girlhood. Her maternal burdens and many household cares had so much absorbed her time as to allow her little time to devote to the arts of the toilet, and had wrought great changes in her appearance. Indoor confinement had made her sallow, too much care had wrinkled her brow and dropped a few touches of gray among her brown tresses, and often weariness and discouragement would drive the smiles from her face and the lightness from her feet, making her a dull companion for her husband when he came home from his office, weary of business and wishing to be entertained.

Herman was now in his prime, handsomer, if possible, than at the time of his marriage. His business, though arduous, was not irksomely monotonous. His office did not require every moment of his presence. He was often on the street, meeting and conversing with acquaintances, hearing the news, and having his mind occupied with the various matters which enter into the every-day life of a business man.

His exercise in the open air kept him strong and healthy; he mingled in society and thus kept pace with the spirit of the times, while his wife went out so seldom that if she ever had an opportunity to attend a social gathering of any kind, she found herself so far behind the times and out of style that she would often decide in her own mind not to go again.

Herman would have been glad to have her accompany him oftener than she did, but she always had so many excuses to stay at home that he grew tired of asking her, and often went without her; and though she did not object in words, yet this conduct always made her feel unhappy.

Thus a slight estrangement had been gradually creeping in between them. Herman, in the flush of his manhood, wanted freedom to enjoy society and find sympathetic souls among the many gifted men and women whom he met, and the desire had its foundation among the purest impulses of his soul. His mistake was in indulging in the recreations which had a tendency to draw him away from his wife, instead of keeping her along with him. He might, if he had tried, lightened his wife's cares in many little ways, and interested her more in the matters which possessed charms for him, for Mary had more than an ordinary share of intelligence, and might, with half the advantages of her girlhood, have made herself a most pleasing companion. It is hard, however, when a person's mind has taken to running in a groove, to turn it in other directions. At any rate, in this instance, Herman did not succeed to his satisfaction, and so ceased trying.

It would be hard to say when the thought first occurred to Herman that perhaps he and his wife were mismated. He was young when he was married, and surely such mistakes were made sometimes. Why not in his case? He tried to put away the thought at first, but the more he went into society, and left Mary at home, and the more he saw of brilliant people, and contrasted them with his wife, pale, dejected, and uncommunicative, the more persistently would the idea thrust itself into his mind. By-and-by another thought came. Perhaps somewhere in the world was his real soul-companion, one who could brighten his life instead of casting shadows over it. It was true he had not lost all affection for Mary, but was it not the affection of friendship instead of the holy flame of love he had once thought it? With these feelings in his heart he began to look upon himself as a man to be pitied, a sort of martyr, and forgot to sympathize with his long-suffering wife, neglecting to use means

for fanning the smouldering coals of the old affection into new life again.

Meanwhile his home began to grow irksome to him. He was fond of his children, but their boisterous plays often annoyed him, and he was seldom in the mood to enjoy their society. He began to form a habit of going out directly after supper and calling on a friend or attending some lecture. His tastes were not low; he never frequented drinking-saloons, or allowed himself to mingle in any society that was not considered highly respectable.

His wife had, at first, offered some protest against his going out so much.

"Why do you go out this evening, Herman?" she said to him once, "I don't know but you are losing all interest for home, you are absent so much."

If Mary's words had been spoken in a loving, pleading tone they might have had more effect upon her husband, but they were uttered with the injured, complaining air which always tried his patience, so he said, hastily:

"I do not see why you need to complain as long as I provide for your comfort, if I go occasionally where I can find pleasant company."

He was sorry the moment the words were spoken, but he little knew how deeply they had hurt. The sarcastic retort that followed did not enlighten him, nor did it improve matters in the least.

"By all means," was Mary's answer, "go where you can find agreeable company. It would be a pity for your wife and children to interfere with your enjoyment."

He went and shut the door hard after him as he left the room. He did not know that Mary cried herself almost into convulsions after he had gone, and that her dull hollow eyes and listless air the next morning were the result of the violent grief in which she had indulged the night before.

When a man begins to let go, one by one, his home interests, he is not long in forming others of a different nature, and so it was with Herman. He had allowed himself to think that possibly there might be an "affinity" for him somewhere in the world, and although he had no intention of trying to seek a "soul-companion," or of accepting one should such a person be thrown in his

way, yet he began to look upon women with new interest, to study their dispositions as far as he could, and compare them with his own, and say to himself, "If I were free now, with the experience I have gained in all these years, I might have an opportunity to realize true happiness in the marriage relation.

All this time Mary was helping to dig the grave of her own happiness, when, instead of simulating cheerfulness, studying her husband's tastes, and striving to make herself agreeable, she grew more reserved, answering him sometimes with bitter retorts, and trying less to make home pleasant as she saw he was growing to care for it less.

Herman was a man of strong passions, and found great pleasure in the physical enjoyments of life, nevertheless he had attained a high degree of mental and spiritual development, and there was a tender spot in his conscience which might not easily be seared. In the matter of domestic infelicity he was allowing himself to be taken off his guard, and where it would all end he had not yet considered. Thus, when temptation came, as it did at last, it found him unprepared to battle against it successfully.

He met Mrs. Clyde at the house of a friend, and subsequently at various public and social gatherings, and he and she became very well acquainted. She was a fascinating woman, beautiful in face and form, brilliant in conversation, and possessing that magnetic influence over the other sex, which renders such women so dangerous. Their acquaintance soon ripened into friendship. They talked, sang, and rode together; they accompanied each other to concert and theater; they discovered mutual tastes in art and literature, and last and most perilous of all, they confided to each other their mutual unhappiness in the marriage relation.

Mrs. Clyde was married when a mere child to a man old enough to be her father. The match was made by her parents, and she scarcely had a voice in the matter. Her husband was very wealthy, and treated her kindly, and she lived like a princess; but this did not satisfy her heart. She could not love her husband, and the feeling with which he regarded her seemed like that of a parent toward a child.

"If I had taken my choice," she said plain-

tively to Herman, "I would have chosen the humblest lot with one I loved in preference to the gilded misery which I now endure."

Herman believed and pited her; was irresistibly fascinated by her, and too soon came to the conclusion that they were the kindred souls created for each other, and that it was a most cruel fate which doomed them to live apart. By degrees this feeling crept into his heart, until at last he allowed the tempter to whisper that it was not yet too late for them to be happy. It was a common thing now-a-days for people to break their marriage ties, and seek their affinities elsewhere; and though he had always claimed to disbelieve the doctrine, yet it might be true after all. He would investigate the subject more thoroughly, he said to himself, for he was anxious to do right, and was it not a downright sin to continue in the marriage relation after all conjugal affection was dead?

Poor Mary found her lot about this time a most trying one. She seldom went out, and received few callers, but a word would occasionally reach her that would cause her heart to ache most sadly. That Herman was changing toward her she could plainly perceive. He grew cool and indifferent, and spent very little of his time at home. Even his children, much as he loved them, engaged his attention far less than formerly, and it was with a heartache, which only a loving wife can understand, that she felt her influence over him slipping away, and knew not how to regain it.

Meanwhile Herman, with subtle sophistry, was drugging his conscience and allowing himself to drift toward the goal of unholy passion, of crime, and ruin. It was a stormy winter night. Herman had been intending to take Mrs. Clyde to the theater, but the storm prevented, and so they were spending the evening together alone, for her husband was away and not expected back for several days. It was a magnificently furnished room where they were sitting. Warmth, light, and the most exquisite taste surrounded them. Mrs. Clyde had never looked more beautiful, and never was her manner more in unison with Herman's feelings. Brilliant she always was, but to-night she was more subdued and quiet than usual, with a touch of shyness in her manner that rendered her

more captivating than ever before. Herman was reading a tender love song in a low passionate tone, while she sat near him listening as only a woman can listen whose whole soul is bent to the task of winning a man to her feet. As yet no actual words of love had passed between them, but Mrs. Clyde felt sure that he would not leave her this night without some expression of the passion that showed itself so plainly in every look and action.

A loud ring at the door startled them, and with the thought that it might be Mr. Clyde, they moved to a more respectful distance from each other, and for the moment the spell that held them so closely the past hour was broken. What was Herman's surprise when, after a moment, the servant opened the door and his own child, a little boy of about twelve years, stood upon the threshold.

His face was purple with cold, and his clothes powdered with snow, but as he stood there, cap in hand, his bright eyes glowing, and his damp hair curling around his forehead, Herman's first thought, in spite of his surprise and alarm, was one of pride in his beautiful boy.

"What is the matter, Harry?" said Herman, for he saw at once that the child's face was full of trouble.

"Nellie is sick," was the answer, "and mother is afraid she'll die. She says won't you please get the doctor, and hurry home as soon as you can?"

Before the child ceased speaking Herman was in the hall drawing on his overcoat, for little Nellie, the four-year-old baby, was his especial pet and darling.

Mrs. Clyde took in the situation, and followed him to the door with words of tender sympathy.

"I am so sorry for you," she said, "I shan't be able to rest till I know how the little one is. Do try and get me word, and let me know if there is anything I can do.

Herman scarcely knew what answer he made, he was so filled with fear for his child, and the next moment he was holding Harry by the hand and facing the cold north-easter with rapid strides. Sending Harry on alone after reaching the first corner, he went for the doctor, and made such quick time that he reached home almost as soon as his boy.

Little Nellie had been attacked with croup in its worst form. She had been troubled with a cold for several days, but her mother had not felt alarmed about her until that evening. When Herman and the doctor arrived she seemed choking to death, and though the physician immediately took the most vigorous measures to arrest the disease, yet it was plain that he entertained but little hope of her recovery.

It was pitiful to see her gasp and struggle for breath, and look with pleading eyes upon her father and mother as if asking them for relief, and when everything had been done that was possible, Herman could only clasp his child in his arms and wait in mute agony for the relief which death alone could bring. The little one retained her perfect reason, and tried to talk when a momentary cessation of strangling permitted. Once, with great difficulty she said, "Nellie loves papa and mamma."

As Herman held the child in his arms his wife bent over her with face pale and set with agony. He noticed how thin she had grown, and how careworn was the countenance once so bright and blooming, and conscience smote him with a great pang as he thought of his late neglect, not only of her, but also of the little one that lay dying in his arms.

Nellie opened her lips and tried to speak, but the words were choked back unuttered.

"What is it darling?" said the mother, bending lower over the white baby face.

Did an angel whisper to the little one that something was wrong between the two she loved so much? Verily it seemed so, for she looked from one countenance to the other with quick, troubled glances, and then suddenly clasping an arm around each neck she drew their faces down together until Mary's brow touched Herman's cheek. With a new, strange impulse, Herman turned and kissed the white forehead. It was the first kiss he had given his wife for many long months, but their mutual trouble brought back some of the old tender feeling which he had thought was dead forever.

She did not return the caress, she did not even look at him, but a sudden rush of tears overflowed her eyes as she bent her face to

her child's and kissed the lips now growing cold in death.

Little Nellie died in her father's arms. With agony unutterable he saw the waxen lids close over the sweet blue eyes, and felt the little form grow cold and stiff as he held it. Remorseful thoughts haunted him continually, and the vision of Mrs. Clyde that rose before his mind's eye gave him no pleasure, with the pale, sad countenance of his wife before him. His mind was a whirlpool of varied feelings and emotions. He thought of his early married days, and the bright hopes with which he and Mary set out in life, of their late estrangement and his mad passion for a woman who was the wife of another, and it seemed to him as though he was in a terrible nightmare.

He was in that state of mind when circumstances could have power to sway him either for good or evil. Had he met Mrs. Clyde at that time, and come under the influence of her fascinations, he might have been irrevocably lost, but in these first hours of sorrow he did not seek her presence. On the contrary, he felt strangely drawn toward his wife. She seemed so sorrowful and broken-hearted, that he longed to say something to comfort her, even though it might be no more than the sympathy that a brother might offer a sister.

Mary was so quiet and reserved that he had no means of judging her feelings toward himself, and sometimes he half thought that the old affection had died in her heart, even as he believed it dead in his own.

The remains of little Nellie were placed in the grave, her clothes were folded and laid away, her voice was hushed in the house, and the light of her presence had left it forever. When it was all over, a reaction came upon Mary. She sank down utterly helpless, a fever set in, and the doctor who came to see her shook his head gloomily.

"It's a chance if she ever gets well," he said, "there is some trouble here that dates further back than the death of her child. Mind and body are utterly exhausted, and she has been dying by inches for months past. Nothing but the most devoted care can save her now."

Herman heard and understood. For the first time he realized how a woman could

prove a martyr to her feelings. He took his place in the sick-room, scarcely leaving it to eat or sleep.

"What does it matter if I give my life for hers," he said to himself. "I might as well die as live. I will atone for my past neglect in this way."

He watched by her bedside night and day, and, listening to her delirious ravings, he learned how devoted and unchangeable was the love which he had wronged and doubted, the true, pure affection which he had cast aside for an unholy passion.

In her delirium she talked almost incessantly, and it added ten-fold to his shame and remorse to learn that she knew of his late infatuation, and yet had maintained such strict silence upon the subject. Sometimes she would speak of their early days as though living them over, and would call him by fond, endearing names, and tell him how happy she should try to make him, and what lovers they would be all their lives; and often he could not refrain from weeping as he listened. Watching and listening thus by his wife's bedside, he began to realize the pitfall on whose brink he had been standing, and shuddered that he had come so near falling into its depths. One day Mrs. Clyde's dainty card was sent into his wife's sick-room with a pencilled request to see him, if only for a moment. For a little space he hesitated, but Mary's voice, whispering just then of the past in words of loving tenderness, decided him. He wrote on the back of the card, "I can not leave my sick wife even for a moment," and sent it to the lady who was awaiting him in the drawing room. She went away disappointed, but by no means in despair of regaining her influence over him.

The weary days passed by, and at last Mary began to recover. When she regained her consciousness, her first thought was for Herman. She seemed to forget all the estrangement and sorrow of the past months, and as she looked into his weary, care-furrowed face she said, "Darling, you have watched too much. I am afraid you will be sick."

His eyes were dimmed with tears as he bent down and kissed her. "Never mind me," he said, "if only you can get well."

It was incomprehensible to Herman how the old feelings crept back into his heart.

When the change begun he could not tell, but every word from those pale lips had become as precious to him as pearls. Every day the feeling strengthened, and he wondered how he could ever have been so blind as to imagine that he had ceased to love his wife. He petted and caressed her as he would an infant, and her recovery was materially hastened by his affectionate attentions. When she was strong enough to bear it, he made a full confession, and asked her to forgive him and take him back into her confidence.

"It was as much my fault as yours," was her answer; "I would have tried harder to keep your love, but I did not know how. If you had realized my feelings when I seemed so cool and sarcastic, you would have known better how to appreciate me. There has never been a moment of my married life that I have not loved you with all my heart."

A new experience had come to Herman and Mary. Their hearts had been tried in the bitter school of affliction, and they realized now that love is a tender plant that needs nourishing with the most zealous care lest it languish or wither away.

When Herman was at liberty once more to attend to business, and the demands of society, Mrs. Clyde sought him again and again, and tried her sweetest blandishments in vain. He could now look upon his late infatuation in its true light, and she had no power to charm him to her side again because of the talisman of love in his own home. Never in the early days of girlhood had Mary tried harder to render herself agreeable than now. Though the freshness of youth had departed, she was still fine-looking, and her effort to be cheerful and please her husband lent a charm to her manner that made her a really fascinating woman.

She entered eagerly into whatever interested her husband. She read the highest-toned literature, and the news of the day; she accompanied him out at evening, when her health permitted, and at other times she devised some pleasant entertainment at home. She practiced daily upon her long-neglected piano, and when Herman came home from his day's work in the office, he would find her attired with perfect taste, as though expecting visitors. It was strange how much time she found in which to do these things,

but one can do a great deal when the whole soul is in the work.

As for Herman, he seemed to feel the same interest in Mary's society as when they were first married, and her efforts to please him met with a hearty response on his part. He had no more unsatisfied yearning after soul sympathy. In all his seeking for a kindred spirit, he had never found any person so truly sympathetic and congenial as his wife, now that she tried to render herself so, and they had come to a better understanding of each other.

In the happiness of after years they tried to forget the bitter experience of the past, but never did Herman stand by little Nellie's grave without recalling it all, and thinking that perhaps, under Providence, the death of his child saved him from ruin.

CONTENT WHIPPLE.

SCHOOL-GIRL NATURE.

HERE is a bit of word-painting so true to life that we must share it with JOURNAL readers:

A curious controversy is just now going on between the girls of the Normal College and the police in charge of the Central Park, as to their respective rights of possession to the flowers growing in the Park. Many of the girls live on the west side of the city, and the college being situated at Fourth avenue and Sixty-ninth street, just on the eastern skirts of the Park, they naturally take a short cut through the Park grounds in going to and returning from the college building. The Park guardians after a time awoke to the fact that the flowers were disappearing, and it was only after the exercise of much vigilance that they finally fixed the fault upon the bevy of fair damsels who every morning tripped laughingly through their precincts. One of the watchmen tells his tale of trouble thus: "Yes sir; it's a fact those girls does the trick, and mighty hard they are to catch, too. Now, when you sees a lot of boys you know they are up to something, and they holler and raise a row so you can tell where they are. But these girls are sly ones. You don't expect they are up to shines, so you don't watch them so close, and if you do they'll get the best of you somehow or another. They are as mum as mice when they are getting the flowers, and they slip them into their dinner satchels and under their cloaks, so you can't be

positive when they do have them or not, and it won't do to search every one as she goes out. Why don't we arrest them? A nice time we would have with a dozen or two of these critters in charge. The other morning I nabbed some; they were busy at work on a bank; two were picking, the rest taking the flowers and packing them away. One girl was walking on some distance ahead studying like everything, and a couple of others strolled slowly away behind—outposts, you know, to give the

alarm. Well I cut across and slid down the hill right on them. What a scream there was! but I looked savage and said I'd arrest the two who were picking, but the rest got around me and talked and laughed and said I'd have to take them all. I got most smothered among them, and at last away they ran off, flowers and all, leaving me standing like a fool. I don't want to have nothing to do with 'em; you can't club 'em, nor scare 'em, or anything else."

LITTLE BLUE EYES.

PACK away the little dresses
That our darling has outgrown,
Round them cluster precious memories,
Brightest hopes our lives have known;
In their folds of snowy whiteness
Have we watched her form so fair,
While our souls gave silent utterance
To a parent's earnest prayer.

Holy angels, bless our darling,
Guard and guide her tender feet,
Fill her soul with heavenly wisdom,
Make the path of duty sweet.

Ere the rosy lips could utter
Words whose meaning we might trace,
Sweetest smiles of recognition
Played about her cherub face.
Now her prattling tongue beguiles us
Evermore, with music rare,

Baby talk and merry laughter
Fill with melody the air.

Little socks, so thin by wearing,
Little toes were peeping through;
Keep the treasures for the future,
Tokens unto memory due.
Shoes and stockings, shorter dresses;
Looks as proud as any queen,
Mamma's blue-eyed, laughing baby,
Happier girl was never seen.

Precious child, about thee ever
Is a mother's holy love;
Pride and joy in thee are centered;
May a noble womanhood
Be the crown to deck thy forehead,
Be the chorus rich and grand,
Echoed by celestial voices,
From the shores of spirit-land.

THE WORK THAT WINS.

IF I can only impress upon the young men who read this JOURNAL the importance of choosing one thing for their life-business, and sticking to it, I shall not have written this article in vain. What is success but the reward of persevering industry? Oh, I don't have any reference to that industry of some people, who go changing about from one thing to another during their whole lives. They may be the busiest people in the world, but they accomplish nothing. I mean the well-directed effort that lays siege to some particular trade or profession, and conquers and takes full command of it, just as armies besiege and conquer a strong city.

Oh, the desire to be brilliant! I think it destroys more fine characters than rum. It is a disease that often works fatally among our talented young Americans, withering in-

herent genius by pulling it from the particular soil where it naturally grows, and transplanting it wherever foolish fancy dictates.

What a pity it is that there exists, even in our land, a spirit which looks disparagingly upon hard-working, slow-plodding mediocrity. There is a thousand times more hope for an honest shoemaker, who does his work well and sticks to his business, than for your brilliant fellow who gallops over land and sea, now scribbling a nice little poem for a newspaper, again reading a little of law, next rummaging medical books, and what next he will do the Lord only knows. Continuity, like every other quality of mind, is capable of development; but, like others, alas! it is sometimes largely inherent, and often exhibits itself in a remarkable degree,

quite early in life. Show me a boy who makes his kite fly in spite of its ragged tail and a boisterous wind; who works day after day, and night after night, at his problem, and gets it; who whittles till his fingers are sore and his knife is dull, but finally succeeds in making a top to suit him, and I do not care if he is "as slow as molasses in winter." I'll wager my money on him a hundred times in preference to the bright, smart little pet of the school who gets his lessons in five minutes, and lets his kite go to the dogs, because the tail breaks.

Continuity is worth more than genius. The two united makes John Milton. The first, fully developed, makes Wm. Wordsworth; but a bright intellect, without a genius for work, makes the village wit who glorifies the American eagle on the Fourth of July, and rolls in the corner of a beer saloon on Christmas day. United, they always perform wonders; but the ability to persevere in one course often performs wonders anyhow, while genius, without Continuity, is always dancing about like a wil-o'-the-wisp, deceiving people, and constantly shining very dimly through a mist.

Oh, how many fine young men we have seen of acknowledged talent and finished education, who have had to yield the palm to some plodding fellow who was reckoned a blockhead in his school-boy days!

John M——, while at college, was regarded as a young man of great promise. The professors lavished much praise upon him, and if there were any offices to be filled in students' associations, the honor was generally conferred upon him. On commencement day, he delivered one of the most pleasing orations given, and the audience whispered, one to another, "How eloquent!" The first year after he received his diploma, he taught school; the next he studied medicine; the next he had something to do with a country paper; for a time he kept books; and for several years more he was engaged in several other things, and the last time I saw him he was about thirty-five years of age, and only a lawyer's clerk.

William P——, his early school-mate, was not nearly so apt a scholar; yet, by dint of hard study he managed to worry out all of the difficult points in his lessons. Be-

sides, he had so many peculiarities in his ways, that the school-boys were tempted to poke fun at him, and play sly tricks at his expense whenever they could. Being sensitive, this, of course, hurt his feelings, but no doubt contributed somewhat to his success, as it goaded him to greater diligence, so that he could have revenge upon his tormentors by beating them in recitation. But he never got higher than the public school. He had to support his widowed mother, and her poverty would not allow him the luxury of a collegiate education. So he began active life by teaching a country school, and, liking the business, chose teaching for his profession. Year by year he added to his store of knowledge, until he became recognized as a thorough English scholar, as well as the most successful teacher in the country. At thirty-five, while John M—— was still a lawyer's clerk, he was State Superintendent of the public schools, in one of the foremost States of the Union.

The cause of difference in the career of these two men is easily seen. One was inconstant in his work. The other entered his profession early, and worked as if he had made solemn oath to be faithful to it until death. When a man chooses his profession or his trade, as he chooses his wife, because he loves it above all other things, and proves himself faithful to his first love by an unwearied diligence, it requires no prophet to foretell his success. J. L. M'CLELLAND.

A SKETCH FROM LIFE.

"DO you really believe that the passion for strong drink can be inherited by children of drinking parents?" asked a young lady friend as we were conversing together.

"Most assuredly I believe it, and have in my mind's eye a case that will go far to prove it. When I first knew George Alston, he was a little tow-headed urchin, scarcely five years of age; but I can remember how proudly he used to draw himself up as he would say, 'I belong to the Temperance Army, for the devil is in the whiskey.' He had a gentle mother, one who had been beautiful as a girl, and, though care and untold misery had written deep lines of suffering all over

her face, she was lovely still. She had made a grave mistake in marrying a man who occasionally drank, and was now reaping the bitter reward of her folly. But she tried to teach her boy godliness and temperance, and she flattered herself that she was succeeding admirably, little dreaming that a wine-bibing father had stamped her only child with this master-passion. Little George grew, and as his body and mind developed this insatiable thirst began to burn; but with a giant-will he kept it in subjection for his mother's sake. 'Oh, that I had died before I ever tasted the cursed drink! then my mother's head would not have been bowed with shame or my name a perpetual disgrace. Ah, me, God knows I fought it long and bravely, but it was too strong for me, too strong,' and in calm despair he turned his face to the wall and died a drunkard's miserable, unhappy death. This was the way it happened, so his mother told me, 'George never tasted liquor of any kind till after he was eighteen years old. Then he met Carrie Conklin, who engaged his boyish affections. On her seventeenth birthday my boy was invited to a party given in her honor. They had wine there, but I let him go without a warning, so sure was I of his firmness. Yet when the toast was to be drank to the young lady herself, the sparkling Moselle having been poured out, he drank with the rest, unable to withstand the temptation in its most seductive form. He was brought home drunk, and the Rubicon once passed, his downward career was swift. The very woman who had led him on to take the first step was the foremost to gather her skirts away from the common drunkard whom she had helped on the way. May God forgive her, for I am afraid I never can,' said the poor mother. Such, Helen, is one case out of many; and to go back to our first subject, what caused George Alston to thirst for that which he had never tasted? It was a clear case of inherited appetite, and, bitter as it was, was only a natural result of such a union. I think if young ladies all over our land more fully understood this subject, if they would give it more earnest, practical thought, they would hesitate before they gave their being into the keeping of men who drink moderately. It is a fearful experiment, one that fails nine times out of

ten, and culminates in misery and untimely death. There are girls, numbers of them, who continually seduce men from sobriety by tempting them to drink, offering the cup with jeweled hands and dainty, fascinating smiles; but, thank God, they are growing less. The wine does not flow as freely as of old at the festive board nor in the gay saloon. The people are slowly waking up to its injuries, and a noble band throughout our country are praying daily to be delivered from a curse that is slaying its thousands and ten thousands every year."

"You are growing eloquent, cousin," said Helen with a mischievous look.

"Perhaps so, but my whole heart is in the work, and the temperance reform fires all the energy within me. My only regret is that my pen is so feeble and my voice so weak in its work."

MRS. B. F. BAER.

KEEP YOUR PROMISE.—A boy borrowed a tool from a carpenter, promising to return it at night. Before evening he was sent away on an errand, and did not return until late. Before he went, he was told that his brother should see the article returned.

After he had come home and gone to bed, he inquired, and found that the tool had not been sent to its owner. He was much distressed to think his promise had not been kept, but was persuaded to go to sleep, and rise early and carry it home the next morning.

By daylight he was up, and nowhere was the tool to be found. After a long and fruitless search, he set off for his neighbor's in great distress, to acknowledge his fault. But how great was his surprise to find the tool on his neighbor's door stone! And then it appeared from the print of his little bare feet in the mud, that the lad had got up in his sleep and carried the tool home, and gone to bed again, without knowing it.

Of course a boy who was prompt in his sleep was prompt when awake. He lived respected, and had the confidence of his neighbors, and was placed in many offices of trust and profit.

If all the grown folk felt as this boy did, there would be a good many tracks of bare feet found some of these bright mornings; and what piles of tools and books would be found lying at their owners' door!

Department of Literature, Science, Education.

A PLEA FOR PHRENOLOGY.

BY AN AMATEUR.

IT would seem almost nonsense at this late day to put in a *plea* for Phrenology; yet in our experience there is still much call for continued efforts in this direction. To us it is as surprising as it is true, that a science at once so simple, yet so comprehensive, should continue to meet with such disfavor among men of real ability. Of late, though, this has not surprised us as much as it did formerly; as one might say, we are getting used to it. It is a queer experience, though, to have a truth appear to you at once so important, so simple, so natural, and yet to see about you men of intelligence so utterly indifferent to its importance.

In our experience we have found this indifference of two general kinds: First, there is that which condemns and ridicules without any knowledge at all; Second, that which men exhibit who have apparently given it a little study, and who perhaps recognize its teachings in a few general points, yet utterly deny its teachings as a whole; and regard them as childish—too elementary for their advanced intellects. When any conversation has introduced the subject in the presence of this latter class, they have turned to us in rather a complacent manner, with the remark, "What! you believe in Phrenology—you a phrenologist!" "Yes," we have replied—"We used to once;" they would add, "but have got all out of it now." And at once they have desired to change the subject, and their manner has indicated that we must be a little "cracked"—there must be a weak place in us somewhere to believe in such notions— notions that they have *graduated* from some time since. In regard to this class we leave it with the future to determine who are foolish, they or we.

We believe in Phrenology, and have derived much practical benefit from its teachings. It has taught us how to develop our faculties, revealed to us our weak points, and led us to strengthen them.

When people learn that we are a believer in this science, they immediately want some practical test in the shape of examining *their* head. As we are not a *practical* phrenologist, never having had any facilities for practice in this line, we can not give them a very satisfactory examination. We know the leading points; but it seems difficult to make them understand that, in order for a man to be able to make a correct examination, and to become an expert in this line, he must have a chance to study the science in a practical way; for in our mind it requires the study of comparative Phrenology from life in order to be an examining phrenologist. Sometimes this information is satisfactory, and sometimes not. We always, however, tell these people to go to some good examiner. The reply to this generally is, "Oh, those fellows will tell you most anything; and, after all, they are only sharp scrutinizers of the human countenance." And then they will go on to relate various clap-trap stories that they have *heard*; for instance, some such story as used to be going the rounds about some phrenological students in New York and Horace Greeley; about some one taking the cast of a round squash to the students and asking them to examine it—to feel the bumps; and they pronouncing it to be a cast of the head of Horace Greeley. Such is a fair sample of these long-exploded stories; yet, strange as it may seem, the opponents of Phrenology never tire of relating them in order to ridicule the subject and to create a laugh against the phrenologist present.

We have had our heads examined at different times by five or six different phrenologists, and they have all told essentially the same story. They have only varied in a few minor points; for example, one has marked us in the scale of seven, a number higher or lower than another. A well-known examiner in New York has given us essentially the

same marks every time, and even detected increased development in our skull before we had realized it ourselves. We knew that we had improved in a certain point, but knew not, and did not think then, that it would be indicated on the skull—that we carried about us a tell-tale that the experienced phrenologist could detect. For instance, we were born small in the organ of "Self-Esteem"—not much more than the degree of four (4). We were thrown out into the world. A few years afterward, while in New York city, we thought we would call on the examiner and see what he would say now. He could in no possible way have known us—at least he must have the most wonderful of wonderful memories to remember every Tom, Dick, and Harry that comes under his eye, and to remember just what he had told them. He possibly might remember what he had said of some well-known individual; but we were a perfect stranger to him, and he would not know us now if we should call on him again, say next week or next month. Yet, should we call, we doubt not that he would tell us the same story over again. This last time we were there he says: "You have been cultivating your 'Self Esteem' of late." "How do you know that?" we inquired. He then told us that he detected it in the "sharpness" of the organ.

These facts, to us, are among our strong proofs of Phrenology. They are personal, and come home to us in a practical manner. Had we any disease of the body, we very much doubt if we had gone to the same number of doctors that they would have agreed any better in their diagnoses. And we think that they might have varied in their statements much more than these phrenologists did in theirs; and all, individually and collectively, have retained the confidence and respect of their patients and the community. In our experience we find that there is little sympathy for any slight errors or oversights of the phrenologist. The world expects truth and perfection from him; yet people are not always willing to accept the truth; they want a little flattery thrown in. They often want the phrenologist to discover in them something great. By the way, we will simply state that our examiner did not

flatter us, and that we are not prompted to return any compliments on that score. Sometimes such people as those alluded to above must be very trying to phrenologists. We know of a case of two persons calling on an examiner (we would here remark that the story came from the *other* of them), one of whom had large ideas of himself, and seemed to think that he was cut out for one of America's great sons. He had his fingers in his mouth—after the supposed manner of great men, who, on account of deep thought, are very absent-minded; and he had the simplicity to ask if that was not a characteristic with great men; if they did not put their fingers in their mouths. "I don't know as to men," replied the examiner, "but babies sometimes do."

We often hear people say: "Oh, these phrenologists only judge by externals; if they see you are dressed-up pretty smart they will give you a flattering character—we have a mind sometime to dress up in old clothes and go and get a chart from Fowler and Wells; then go there again at some future time, in full dress, and see what they will say then." This they think very clever. They do not see how the phrenologist must, to a certain extent, judge by externals. A man must not assume the air of a fool, and then think his fellow-men fools for not discovering that he is a wise man. The phrenologist in some respects is obliged to judge by exteriors in forming his opinion of the culture of the subject before him. There is no one, with ordinary sense, so ignorant as not to know that a piece of land, or a tree that has been well cultivated, will, under similar circumstances, bear better fruit than the uncultivated. Even a New Zealander, with no education at all, may have a better head than some men in civilized life who are recognized as being quite able men. Yet it would not do to ignore the external evidence of culture, and pronounce the ignorant and uncultivated New Zealander to be superior to these men. Culture makes a great difference in nature; and in none does it make any greater difference than in man, the highest of created beings. The higher the grade, the greater the difference caused by slight variations.

We notice that those people who oppose

Phrenology and will not admit it as a science, always speak of it as an art; and are hardly willing to give it that rank. Yet when we consider what it is, what are its teachings, and what broad views of nature it opens to us, we think that it is entitled to a name, and to a rank beside any of the acknowledged sciences taught in the colleges of the land. Men only hurt themselves by refusing it its due rank and to admit it into their studies.

These men have a queer idea of the human skull and the brain within. We have lately been thrown in with a young doctor. He has studied the human system, the anatomy of the brain in all its parts and relations, and so he *knows* that the brain *can not* change its shape after the skull has become fixed, say as it is at twenty-five years. He would thereby convey the idea that the skull was something like a cast-iron shell, and that it was *absurd* for one to think that a soft body like the brain could in any manner change its shape. And this *he* seems to regard as the strongest proof against Phrenology. We have told him to the contrary; but, as he is a doctor and we not, he will not believe us. Yet from personal experience, as well as from the higher and more general testimony of Phrenology, we know that the brain does form the skull, and not the skull the brain; and that by culture one can improve the action of the brain and develop it in size and strength even as he can the muscles and limbs of the body.

The trouble is that Phrenology is not "classical." Had it been, and had it not taught one quarter the amount of truth that it does, it would have been accepted instead of being generally slighted by the colleges of the land. But already they are beginning to steal its thunder. They are, little by little, acknowledging its truths and ingrafting it in their old system, while they yet condemn it as a whole. Occasionally we hear of lectures by certain "doctors" and "professors" on the mind, which are spoken of as though they were something new, and containing wonderful truths in relation to the human mind that had recently been discovered by *them*. But when we come to see a full report of the lecture, all we find of value in it is something as familiar to the

phrenologist as a lexicon to a professor, or an ordinary piece of hardware to a house-carpenter. It is strange to us that these men of intelligence will not accept the whole truth in a wholesale manner. Such is the way of the world. Rather a poor consolation, yet one that must be duly considered.

We do not wish to force anything upon mankind, but we must think that narrow-minded, obstinate opposition, and indifference to the teachings of Phrenology are detrimental to society at large, especially to those who are ignorant of its teachings. We have always been thankful that fortunate circumstances, some twenty years ago, put into our hands one of Fowler and Wells' small pamphlets on this subject. It prepared the way to our future knowledge on this subject; becoming interested, we followed up the study of it, and have found it of great advantage and satisfaction to us. We wish that those who are still in the dark could and would do likewise.

I. P. N.

NO DRINKERS, SMOKERS, OR CHEWERS NEED APPLY.

VERY recently we met with an advertisement, under the head of "Help Wanted—Males," in which these terms were prominently set forth—"those who smoke, chew, or drink need not apply."

There are many positions which men fill in which these conditions ought to be rigidly enforced; but certainly the last place in the world in which we would expect these terms, to be made the *sine qua non* for the appointment to office, would be that from which the advertisement in question emanated.

The terms which head this article we would naturally expect to meet with in the qualifications required in those seeking to enter the Christian ministry. Most evangelical churches now inquire of candidates if they smoke, chew, or drink, but they do not appear to enforce any rule upon it. The rule to exclude all who can not solemnly and sincerely answer in the negative ought to be made most rigid and imperative. The evil example set to young men by chewing, smoking, and drinking ministers is most hurtful and injurious in its tendencies.

It ought also to be insisted in every Sunday-school in the land that the superintendents and teachers neither smoke, chew, nor drink. It is a disgrace to many a Sunday-school to find it possessed of a poorly-stocked library, while its officers and staff smoke and chew that which costs as much in one year as would fill its shelves with new and interesting volumes for the use of the children.

The Christian church itself, the body of believers, ought to make it a rule that "those who smoke, chew, or drink need not apply." If these three sources of wastefulness were not found among believers, there might be no struggling congregations, burdened with church debts and hardly able to find the the pastors' salaries. Stop these three modes of squandering money in every Christian church in the land, apply the amount now so wasted to enlarging church accommodation and extending Christian operations for the spread of the Gospel, and the result would be that pastors and people, missionary societies and tract societies would not know what to do with the funds so placed at their command.

Bankers, merchants, traders, public companies, and public corporations, municipalities, and the State, the national government and its various departments, ought to lay down the same rule, "those who smoke, chew, or drink need not apply." There would not be one-fifth the cases of fraud and embezzlement by officials and of those in positions of trust if this regulation was laid

down as a strict rule to be strictly adhered to. But we have not yet informed our readers who it is that has resolved on these conditions for those entering their employment. We regret to say that it is not the ministry of the Christian church, nor yet the Sunday-school organizations, nor the body of Christian believers, nor the merchants, traders, bankers, and public corporations, nor the State and national governments—none of these have adopted the rule in all its fullness and force. It is only required by distillers! Reader, pray do not be startled, and give way to any sudden burst of astonishment. We merely calmly state the facts.

The *New York Herald* of Wednesday, August 5th, contained on page 12, the following advertisement:

"Wanted—A few young men, lately landed, to work in a distillery store; *those who smoke, chew, or drink need not apply*; wages \$15 a month and board. Apply ———, West ——— Street."

We think this the best commentary that we have met with upon all the blatant nonsense talked and written by liquor dealers and their advocates about the folly and fanaticism of teetotalers, and the necessity for men to use stimulants. When the distillers want employes themselves, "those who smoke, chew, or drink need not apply."

How soon will this be the rule in the church; the Sunday-school, the Christian ministry, business houses, banking and insurance companies, the State and nation? How soon? JAMES ALEX. MOWATT.

SIR ROUNDELL PALMER, LORD CHANCELLOR OF ENGLAND.

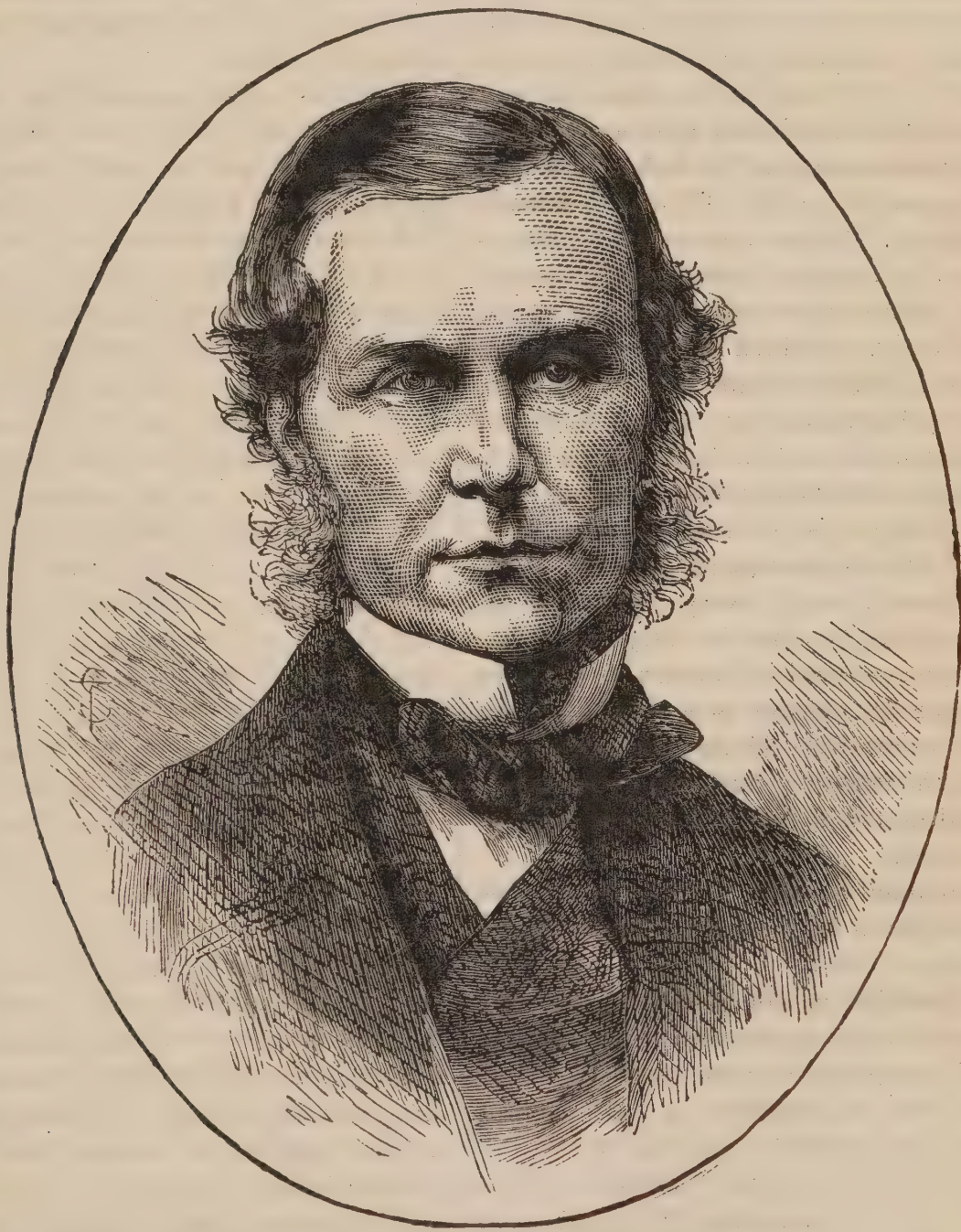
ROUNDELL PALMER, the present Lord Chancellor of England, and generally known as Lord Selborne, is the second son of the late Rev. William Jocelyn Palmer, for many years rector of Mixbury, Oxfordshire. He was born, at the rectory of Mixbury, on the 27th November, 1812. The future Lord Chancellor was educated first at Rugby and then at Winchester school. From Winchester he was elected, in 1830, to a scholarship at Trinity College, Oxford. His career as a student was marked by high success, especially in the departments of classical study and belles-lettres.

On leaving Oxford, Mr. Palmer entered as a pupil the chambers of Mr. Booth, under whose instructions he devoted himself to the acquisition of a knowledge of law, and in Trinity Term, 1837, was called to the bar. The same talents which had made his career at college distinguished brought him practice in the Equity Courts. He became known for his ability and conscientious devotion to the interests of his clients. Year by year his business increased, until a high standing was secured at the bar. In 1849, having well earned the distinction, he was made a Queen's counsel, and soon afterward elected

a Justice of his Inn. On the promotion of Sir Richard Bethell to the woolsack, he became the leading barrister in the Equity Courts.

At the general election in 1847, Mr. Palmer was returned to Parliament, along with Lord Ebrington, and represented Plymouth until 1852, when an effort was made to eject him, on the ground of his opposition to the Ecclesiastical Titles Bill. His rival candidate was

on the affairs of New Zealand, and in defense of the bishop of that colony, whose conduct had been assailed in the course of the discussion; and during the ten years that he held a seat for Plymouth—the first period of his membership—he never failed to command the attention of the House by the fullness of his language and the comprehensiveness of his views on the questions in which he took an interest.



elected, but, on investigation, the election was found to be void, and Mr. Palmer was declared the legal member. His inability to agree with Lord Palmerston's policy in respect to the Chinese war led to the loss of his seat for Plymouth in 1857.

Mr. Palmer's first speech in the House of Commons was delivered in 1848, in a debate

In 1861 an event occurred which brought him back to the House of Commons, and in another capacity than that he had before occupied as an independent member. This was the death of Lord Campbell, and the consequent elevation of Sir Richard Bethell, the Attorney-General, to the Lord Chancellorship. Sir William Artherton became At-

torney-General, and Mr. Palmer, though without a seat, accepted from Lord Palmerston the offered post of Solicitor-General. By the retirement of Mr. Rich, a seat was conveniently found for him at Richmond. Mr. Palmer was returned, received the honor of knighthood, took his place in the House, and by his knowledge, eloquence, and ability added largely to the debating resources of the government. The eminent position assumed by Sir Roundell Palmer in the House of Commons after his return to it in 1861, had been attained by no lawyer since the time of Sir William Follett, who was first Solicitor-General, and then Attorney-General, in the administration of Sir Robert Peel.

In succession to Sir William Atherton, Sir Roundell Palmer was made Attorney-General in October, 1863. In November, 1864, as Attorney-General and head of the English bar, he presided at a great meeting held in the Middle Temple Hall, to do honor to Antoine Pierre Berryer, the distinguished French advocate and political orator. "It is," said Sir Roundell on that occasion, "because M. Berryer is the first living type of incorruptible and unextinguishable integrity, and because, through every political vicissitude, which, for the last fifty years, has beaten upon a disquieted country, he has kept his tongue as spotless as a soldier should keep his sword, that the English bar, a fragment of the universal brotherhood of advocates, had met to do him honor." M. Berryer died in 1868.

Sir Roundell Palmer retired from office with Lord John Russell's second administration, in June, 1866.

The direction of Sir Roundell Palmer's tastes and studies, apart from those of a professional and political character, is indicated by a lecture he delivered in 1852, in the Plymouth Mechanics' Institute, on "The Connection of Poetry and History." In this lecture his aim was to trace the manner in which the chief epochs of movement in the human mind have been marked by the appearance of great poets, and to show how those poets have been the representatives of the different intellectual characters of their several ages.

What may be deemed somewhat unusual for a gentleman of his professional leanings

and experience, he has given a good deal of attention to church matters, and has acquired some reputation outside of England by his compilation of hymns published under the title of "The Book of Praise." This work, which afforded employment for some years for a part of his leisure hours, has gone through several editions. To an edition of Ken's "Morning, Evening, and Midnight Hymns," he has published an introductory letter, in which he defends the authenticity of the text of Ken's hymns as given in "The Book of Praise."

At the Church Congress held at York in October, 1866, Sir Roundell Palmer gave a paper on English Church Hymnody, in which he reviewed a number of the hymns of English writers, and showed in some cases how much the original words of the authors are to be preferred to the altered versions given in "Hymns for the Church of England."

In his career as a lawyer, many legal questions of a public nature have been referred to Sir Roundell Palmer, as counsel. To him, with one or two other eminent lawyers, we may mention was submitted the well-known "Ornaments of the Minister" case, on behalf of several archbishops and bishops of the church. The opinion given was conclusive as to the illegality of sundry practices of so-called ritualistic clergymen.

OPPOSED TO PATENTS.

A strong opposition has gained head of late in England against the patent laws, and has been strengthened by the support of Sir Roundell Palmer, who, it may be said, had he consulted his private interests, would certainly have been among the first to uphold a system productive of such immense pecuniary benefits to the law practitioners. He seconded Mr. Macfie's motion, made in May, 1868, for the abolition of patents, and in his speech propounded the doctrine that invention and discovery were essentially unlike literary production. Copyright, he held, applied to a creation. A man wrote a book; he thus brought into existence something which had no existence in the nature of things before. The rest of the world were not in the race with him to write that particular book. But in the case of inventions and discoveries, the facts with which they were concerned lay in nature itself. All had

a right of access to the knowledge of natural laws, and all engaged in such pursuits were actually upon the track which led to discovery and invention. He could not allow that the man who happened to be the first in the race of discovery could claim for fourteen, or any other term of years an exclusive property in a portion of the common stock of knowledge which was accessible to all who had the means of discovering it. What are termed secondary patents Sir Roundell condemned as unmitigated evils, and said that they exceeded in number patents of importance in the ratio of a hundred to one.

In the matter of

LAW REFORM

he has labored earnestly in this direction for years.

In 1867, in a speech in the House of Commons, he advocated—as regards the three courts of common law—the Queen's Bench, the Exchequer, and the Common Pleas, the abolition of the arbitrary differences which exist between them, and the fusion of the whole as branches of one court having a uniform jurisdiction. Sir Roundell also advocated the establishment of one Supreme Court of Final Appeals from decisions, whether in law or equity. The distinction between law and equity, he held, was in a large measure artificial, and the requirements of the times pointed to as great a fusion of the two as was consistent with a reasonable division of labor and the practical dispatch of business. Out of the Judicial Committee of Privy Council, the Court of Appeal in Chancery, and the Court of Exchequer Chamber, which is the Court of Error in common law, he would create one Supreme Court of Appeal.

Another subject to which, when still at the bar, he devoted much attention, was that of legal education. Now, law studies are what Sir Roundell Palmer emphatically pronounced them in the House of Commons, “unscientific, unsystematic, desultory, and empirical.” What is wanted on the part of students, in addition to the knowledge picked up by actual practice, is a solid, scientific, and systematic acquaintance with the principles of jurisprudence and the history of law, and a testing examination before, as barristers and attorneys, they are allowed to

practice. These remarks apply with great force to American legal affairs.

In the great debate on the second reading of the Irish Church Bill in March, 1869, the speaker who followed Mr. Bright, who, with great power and earnestness, supported the bill, was Sir Roundell Palmer. He was listened to with peculiar interest and attention, alike on account of his high character and of the peculiar position he occupied. Politically attached to the Liberal party and its chief, it was well known that he had renounced the highest prize of his profession—the Lord Chancellorship—rather than be a party to the Irish policy of Mr. Gladstone. Willing to consent to extensive change, and to a reduction of the establishment, he was yet strongly opposed to entire disendowment. He holds that the church is an institution which does a work of inestimable value over the whole land and in every part of society. Like his predecessor, Lord Hatherley, he is, we may mention, a Sunday-school teacher. On the “Alabama” question, his view was from the first very decided that the United States had no case. Before the court Sir Roundell acted as counsel for the British government, and it is said that he refused the retainer of £30,000 (\$150,000) offered to him for his services.

Lord Selborne is a Fellow of the Royal Society. He was made a D.C.L. by the University of Oxford in 1863. He has acted as Deputy-Steward and counsel to the University, and also served on many royal commissions, among which we may name the Marriage Laws, Law Digest, Judicature and Neutrality Laws. The following, from the *London Spectator*, must conclude this sketch: “His gift as an orator is not fire, but persuasive mildness. There is hardly a single passage of ‘eloquence,’ in the common sense, to be found in all his speeches. He is not eager, like Mr. Gladstone, though he is earnest. In speaking, his manner often reminds one of his own mode of characterizing a good hymn, in the preface to his ‘Book of Praise.’ The hymn, he says, should have ‘simplicity, freshness, and reality of feeling, a consistent elevation of tone, and a rhythm easy and harmonious, but not jingling or trivial. He himself, as a speaker, has all these qualities, and he never rises above them into passion or invective. His political nature is too tractable for passion, or even for intense feeling.”

IMMORTALITY NOT PROVEN.

EDITOR PHRENOLOGICAL JOURNAL:

DEAR SIR—Having given much attention to the subject of Immortality, and carefully examined the evidence and arguments *pro* and *con*, I was much interested in the articles thereon, in the JOURNAL, by Dr. Trall and Mr. Pierce. As this is one of the most difficult and important problems with which humanity has to deal, I solicit space to offer a few reflections on the same topic, and to examine one or two of Dr. Trall's positions, with a view to throwing a little light upon the vexed question, if possible.

Dr. Trall says: "If matter is uncreated and indestructible, and only individualized in form, so is soul. This is individual in persons. Both are immortal and eternal—one as matter with physical properties, and the other as living beings, with vital and mental properties." Now, the idea of a *property*, or *condition*, or *process* being indestructible, immortal, eternal, is to my mind simply absurd. The soul is of course the mind, and the mind is thought (at least in part), and thought is a *process*. If the mind were an entity it might then be indestructible, "immortal and eternal;" but it is not an entity but a process, the same as digestion is a process, and is digestion indestructible or immortal? The soul or mind is simply a condition of organization, for, of soul or mind or thought *apart* from organization we know absolutely nothing. We find mind in connection with brain only, and never apart from, nor independent of it. All our knowledge on the subject goes to show that the mind or soul is utterly dependent upon the brain. It is a property or result of organization, as music is a property or result of the instrument, or whiteness a property or condition of this paper, or smoothness of the pen with which I am writing. Destroy the instrument and the music will be destroyed; destroy the paper and the whiteness will disappear; destroy the pen and the smoothness will vanish; destroy the brain and the mind is destroyed. Mind is the function of the brain the same as digestion is the function of the stomach, or circulation of the heart and lungs, etc. As digestion ceases when the digestive organs are destroyed, and circulation when its organs are destroyed, so do thought and individual consciousness cease when their organ—the brain—is destroyed. While there is a living, healthy stomach there is hunger and thirst and digestion; heart and

lungs, there is circulation; brain in action, there is thought—mind; but there is no such thing as hunger apart from a stomach, or music apart from an instrument, or mind apart from a brain. I am quite willing to admit, with Dr. Trall, that soul, in a general sense, that is, as being a part or result of the forces of nature, is eternal and indestructible; but that the personal, individual, conscious intelligence, which we call mind or soul constituting the *ego*, is indestructible and survives the dissolution of its organs, seems unphilosophical and absurd, and there seems no substantial evidence whatever to support it; it is simply a matter of speculation, a subject of faith or belief. The hypothesis, then, that mind, individually conscious and intelligent, survives the dissolution of the brain, of which it is simply the function, is absurd in philosophy, and there is nothing in nature or science to warrant such an assumption.

Dr. Trall says that "man only is endowed with moral and spiritual organs," and asks, "why did not beneficent nature or a kind Providence endow the animals with moral and spiritual organs?" Presuming that by animals he means the *lower* animals (all except man), I would reply that man is *not* universally endowed with moral and spiritual organs and faculties, neither does the rest of the animal kingdom seem wholly devoid of them. The fact is, these "moral and spiritual powers," so called, are graded according to degree of intelligence and other conditions from some of the highest of the lower animals up through certain of the human. They are not innate, original "endowments," but have been acquired. They gradually developed as man rose in the scale of intelligence and needed them. Where there is little or no intelligence, the moral sense would be inapplicable and incongruous, and is not needed, hence does not exist. When it is required, nature, in perfect keeping with all of her other adaptations, develops it. That acute observer and eminent naturalist, Charles Darwin, says: "The following proposition seems to me in a high degree probable—namely, that any animal whatever, endowed with well-marked social instincts, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well-developed, or nearly as well-developed, as in man." (*Vide* "Descent of Man," vol. I, pp. 68, 69.) And Sir B. Brodie,

in view of the fact that man is a social animal, asks: "Ought not this to settle the disputed question as to the existence of a moral sense?" ("Psychological Inquiries," p. 192.)

And J. S. Mill says in his great work "Utilitarianism," p. 45, "If, as is my own belief, the moral feelings are not innate, but acquired, they are not for that reason less natural."

The highest human beings have no faculties or powers that are not needed in *this* life, or at least that are not used here, and the fact of their being used here and there being a use for them, sufficiently accounts, on the theory of evolution, for their existence in man. This is obvious from the fact that some human beings have much less of this moral sense than some of the higher animals, and certainly some animals have much more intelligence than some human beings. Instance the case of the child, the chattering idiot, and the intelligent Newfoundland dog on the sea shore. The idiot would seize the child and thrust it under the water, while the dog would bring it out to save it from drowning. The human would senselessly and mercilessly drown the child, while the brute would intelligently and affectionately save it. Which was superior in this case, the "higher" or the "lower" animal?

Even though these "moral and spiritual organs" were peculiar to, and universal with, man (which they are not) their existence would not prove the immortality of their functions, as Dr. Trall assumes. Why should the functions or properties of these particular organs continue to exist after the destruction of their organs, and the functions of the other organs cease to exist? By what analogy of reasoning or process of ratiocination can this be made out? Dr. Trall admits that these "moral and spiritual powers" are manifested by and through organs of the brain the same as all the other faculties, and equally dependent upon the brain, and why should they survive their organs any more than the other functions?

In conclusion, instead of those "moral and spiritual powers" constituting the "only philosophical basis" for the doctrine of immortality, the doctrine has no philosophical basis whatever, and those who accept it must do so wholly as a matter of faith or belief. As regards its belief being innate and universal, it is neither the one nor the other. The Buddhists number some 300,000,000 or 400,000,000, and they are Nihilists. *Nirvana* is their grand finale—the ultimate and utter extinction of mind, soul, spirit. According to Prof. Max Müller, "Buddhism, in its numerous varieties,

continues still the religion of the majority of mankind." Thus we find the most extensive religion in the world nihilistic, to say nothing of the numerous and rapidly-increasing Materialists, and eminent Scientists, in Europe and America. On this question Lord Macaulay says: "As to the other great question, what becomes of man after death, we do not see that a highly-educated European left to his unassisted reason is more likely to be in the right than a Blackfoot Indian. Not a single one of the many sciences in which we surpass the Blackfoot Indians throws the smallest light on the state of the soul after the animal life is extinct." Plinius says: "From the moment of death, the body as well as the soul can have no more sensations than previous to birth." Büchner says, "That which we call mind vanishes when the individual, substantial combination ceases; and it must appear to an unprejudiced understanding as if this peculiar coöperation of many particles of matter endowed with force, had produced an effect which must end with its cause." Plutarch says: "The state of man after his death is the same as it was before his birth."

Yours, very truly,

ALLEN PRINGLE.

REPLY TO THE FOREGOING.

I can not see what the opinions of men, learned or unlearned, whether numbered by hundreds or by hundreds of millions, have to do with the question in issue. Science has no respect for opinions. It deals only with facts and arguments.

Mr. Pringle has very clearly stated the usual arguments on his side of the question. His logic is unexceptionable, and conclusion inevitable from his premises. But the error is in his premises. He claims that mind and soul are the same, and that man is an animal, both of which propositions I deny.

I admit that the idea of immortality, applied to a property, condition, or process is "simply absurd," or doubly absurd for that matter. But I have made no such application of the idea, as Mr. Pringle may learn if he will read my article more carefully. I applied the idea of immortality to the thing itself—to the soul as an entity.

I also made a clear distinction between mind and soul, which distinction Mr. Pringle entirely ignores. The primary question between us, therefore, is, whether mind and soul are or are not identical. Until this prob-

lem is solved, there is really nothing to discuss.

I understand mind to be the *manifestation* of the soul, not the soul *per se*. To be manifested the soul must have an organ, medium, or instrument. This is the brain. The phrenological doctrine is "the brain is the organ of mind," meaning the structure or substance by which or through which the operations of thought and feeling are performed. But the primary source or cause of thought and feeling is a very different matter. We may term this soul or spirit, but we can not philosophically call it mind nor matter, for neither mind nor matter can *cause itself*. I did claim and still contend that we have equal and precisely the same evidence that soul or spirit exists as an independent substantive entity, that we have that matter so exists.

When the body dies the soul perishes, is the theory of Mr. Pringle and the materialists. Well, matter itself can be annihilated, so far as the recognition of our senses is concerned. But science demonstrates that it is not really put out of existence, but only changed in form. It is resolved into motion. The various states, conditions, or modes of motion, of matter, are termed heat, light, electricity, and magnetism; but these forces are just as material—just as dependent on the existence of *entities*—as are those forms, conditions, or manifestations which we term "gross matter," because it is demonstrable by weight and measure.

"Mind," says Mr. Pringle, "is the function of the brain the same as digestion is the function of the stomach." Very true. But if there were no entity, no individual organism, no person back of the stomach, it could have no digestive function; and so, if there were no entity, no soul, no person back of brain, and operating through it, there could be no mental function.

Do we not recognize the existence of a something as an entity beyond the bodily organization or the mental processes in our thoughts and feelings, and in their expression in words? It would be very difficult, if not impossible, to carry on a conversation or debate a question without such recognition.

What does a person mean when he says, "I have a mind to do this?" Who or what is the "I" that speaks? Is this "I" a "property," "condition," or "process" of itself? That idea would be trebly absurd. Would it not be illogical, not to mention nonsensical, to say, "*I have I to do this?*" or, "myself has myself to do this?" What is the *I*, *my*, or *me*, if soul is mind, and mind only a quality or property of organized matter? How can a person *have* himself, any more than a thing can *make* itself?

So far as the problem of the immortality of the soul is concerned, I accept all that Darwin teaches on the subject of evolution. But evolution is not origination. The forms of life and the myriads of living beings are evolved by the *union* of spirit and matter, not by their *creation*. R. T. TRALL, M.D.

THE TRANSIT OF VENUS.

THE passage of the planet Venus between the Earth and the Sun, which has to observers the appearance of a small dark disk or ball traveling over the face of the great luminary of our system, is termed a transit. This phenomenon occurs but twice in about one hundred years, and its importance to astronomers is great, as may be inferred from the extensive preparations now being made in Europe and in America for the observation of its recurrence on the 9th of December next. It is by means of the data obtained during the transit of Venus that astronomers are enabled to compute the distance of the Sun from us, and on that distance as a basis to calculate with pre-

cision the distance and orbits of the other planets, and also to determine certain questions of interplanetary influence, and with more positive certainty to predict the movements of the moon. The last observed transit of the beautiful planet took place in 1769, and the data then obtained reduced the distance of the Sun from 95,000,000 miles to about 92,000,000. But astronomers have reason to discredit the accuracy of the results then obtained, and look to the coming transit with deepest interest as an opportunity to correct the errors of former observations, and to try new and improved methods of observation.

The transit will be watched by nearly two

hundred observers, distributed among seventy different stations in Europe, Asia, Oceanica, Japan, etc. American astronomers have shown even more enterprise than European in this event. They have selected eight stations for

may appear to be near the center of the building; to the other it may be close to one side. In fig. 1 S represents the Sun, V Venus, and E the earth. Now, if three observers, stationed at *a*, *b*, and *c* on the earth, note the transit, at the

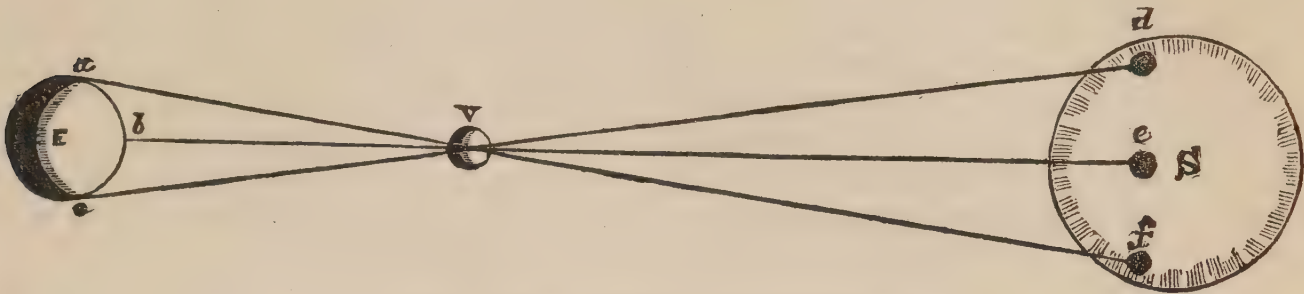


Fig. 1—HALLEY'S METHOD OF OBSERVATION.

their observations, viz.: At Wladewostock, Yokohama, Northern China, New Zealand, Tasmania, and Chatham Island on the east, and Macdonald Island and the Crozets on the west, and have been for several months busily occupied in preparations for their expected work.

The expeditions fitted out under English auspices have stations in Northern India, Oshu, Roderick's, and Falkland islands. The Germans send four parties to Falkland, McDonnell's, and Kerguelen islands. France sends five expeditions, two to Northern China, one to Japan, one to Campbell Island, and one to St. Paul's Island. Russia has selected twenty-five stations in Siberia. Besides these preparations, which have a national character, a number of private observations will be taken by parties at Mauritius, and at the observatories of Madras, Cape-town, etc.

To give the reader, who may not have paid much attention to the details of astronomical observation, some idea of the method pursued for obtaining the data desired, we have procured the accompanying illustrations from a scientific cotemporary. In the first place, it will be understood that two observers, stationed at two points widely separated on the earth's surface, would see Venus while making the transit at two different places on the Sun's disk, just as to two persons a hundred yards apart a tree situated near a building occupies positions quite different when considered relatively to the barn. To one the tree

same time, to the first the planet will appear to be at *f*, to the second at *e*, and to the third at *d*. In the second diagram is shown the positions of the planet on the sun's disk as they will appear in the transit of 1874, and also in the transit to happen in 1882. At northerly stations, Venus will seem to pass along the line *c c'*; at southerly posts along *a a'*, and at central points along *b b'*. Now, if we can measure the solar parallax—that is, the distance between the lines *a a'* and *c c'*—we shall know the angle subtended by any known distance on the earth's surface at the distance of the sun, and

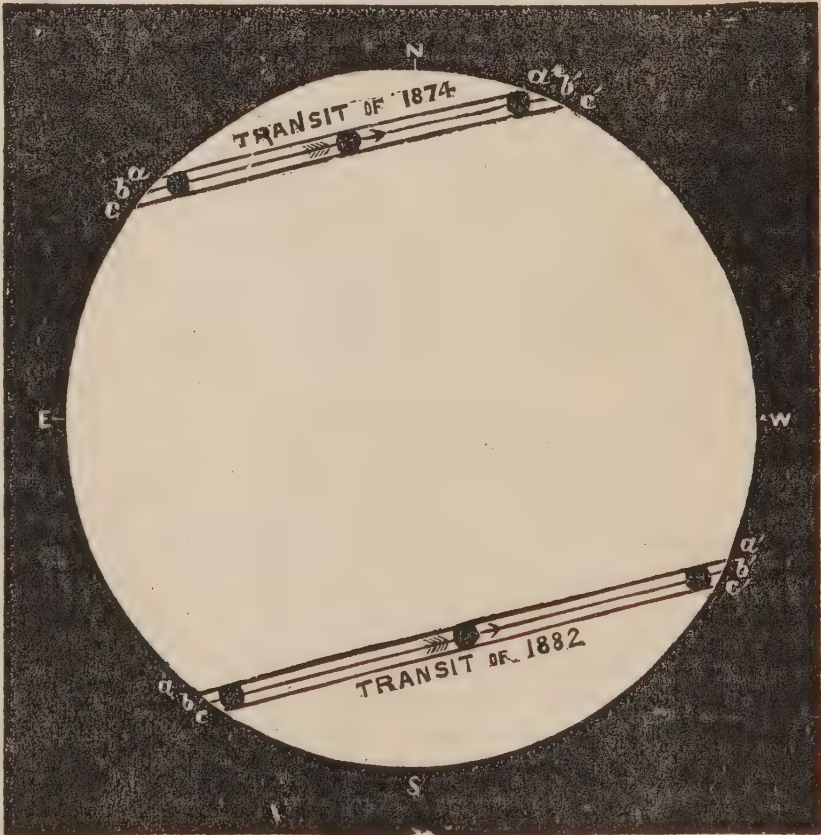


Fig. 2—PATHS OF VENUS OVER THE SUN IN 1874 AND 1882.

hence be given the necessary means for the calculation of the other angles of the triangle, of which the distance between the lines *a a'*

and $c c'$ forms one of the sides. The correct resolution of this triangle determines the distance of the Sun.

Those observers who shall be stationed in both northern and southern hemispheres will define and measure the lines $a a'$ and $c c'$. This gives the length of two chords of a circle, from which it will not be difficult to find the distance between them. This is called Halley's method, after Halley, the eminent astronomer, and it is comparatively simple. Another method, which has many advocates, is that called Delisle's. In employing it two observers,

widely separated, note the exact time when the planet enters and leaves the sun's disk. The difference in the hour and minute recorded will show what effect the separation of the observers has on the apparent position of the planet. Numerous other observations will be taken; among them the sun will be photographed, so that the positions of the black spot, as seen from different places, can be afterward compared. A new instrument, called the heliometer, will be used to measure directly the distance of the black spot from the edge of the bright circle of the sun.

RAILWAYS IN COLORADO.

THE railway history of Colorado is a romance. Four years ago a single track shot across the plains of Kansas, and, like the flying cord of a spider's web, made fast Denver to the East. Now 655 miles of railway are running in Colorado, and 2,070 miles in the system which connects that Territory with the country east of the Missouri. These 2,070 miles have been built at a cash expenditure of \$50,000,000. Is not this a solid undertaking?

But more, the 655 miles in Colorado involve a projected mileage of several thousand miles additional to complete them, about 662 miles of which are now in course of construction. Still more, the 2,070 miles of arterial system connecting the country west of the plains with the country east of the plains, involve to complete that system the construction of some 3,000 more miles at a cost of, say, \$60,000,000.

The following is the mileage of the railways of Colorado already in operation:

Kansas Pacific.....	210 miles.
Denver Pacific.....	106 "
Denver and Rio Grande.....	164 "
Denver and Boulder Valley.....	27 "
Colorado Central.....	42 "
Kansas Pacific extension to Fort Lyon.....	56 "
Atchison, Topeka and Santa Fé (Sargent and Granada)	13 "
Denver and Julesburg—Arapahoe to Longmont.....	36 "
	655 miles.

The railway situation of Southern Colorado, in which the greatest development has taken place, stands at present thus:

The Denver and Rio Grande (narrow gauge)

Railway, projected from Denver southward to El Paso, on the borders of Old Mexico, is now in operation to South Pueblo, 120 miles from Denver. It is under construction thence southward to Trinidad (90 miles), of which 40 are already graded. The Arkansas branch to Cañon City (47 miles) is also in operation giving a western communication. The extension of the Kansas Pacific, known as the Arkansas Valley Railroad Company, is completed and running from Kit Carson, 56 miles southwest, to Fort Lyon on the Arkansas River, 90 miles below Pueblo. The Kansas Pacific promise to complete it to Pueblo.

The Atchison, Topeka, and Santa Fé Railway has already reached Granada, on the eastern boundary of Colorado, and is expected to be pushed up the Arkansas River. These are the railways that radiate directly from Pueblo as a center, when it is remembered that Pueblo, like a key, will more or less control the railway system of two large States, Colorado and New Mexico, the wealth of the territory which she will drain and to which she will distribute is seen to be almost beyond computation. This town will probably be the largest city along the eastern base of the Rocky Mountains from British America to Chihuahua.

The representative railway of Colorado and, indeed, of the future system of the Rocky Mountain base country, is the Denver and Rio Grande, and a few words more in explanation of its history and end will picture the field to the general reader more graphically than long columns of figures or technical detail.

The breath of life has been breathed into Southern Colorado by the Denver and Rio Grande Railway. For long years this section of the Territory, with all its vast resources and wondrous beauty, had been practically closed against settlement, progress, or even inspection. The fertile valleys of the Fountain and the Arkansas might as well have been waste lands; the iron, and coal, and oil, and gypsum, and silver wealth, of its mountains and cañons were practically valueless, until opened by the intelligence and sagacity and energy of Eastern railway leaders.

This road, you know, challenges attention in three great phases:

1. It is a bold demonstration of a new theory or system in railroad mechanics—the narrow gauge.
2. It is the first clearly conceived attempt at a thorough north and south continental line.
3. It opens the gates to Mexico and brings face to face the Latin and Saxon civilizations of this continent.

As the initial narrow gauge railway of this country, the Denver and Rio Grande is a study to scientific men and a curiosity to all others; both classes are busy looking at it this summer. There have been other roads of a narrow gauge built in the United States, but all of them of very limited length, or intended for a special and contracted business. This one aims at a line of 1,700 miles, and is already a full working road, carrying passenger travel and all kinds of freight. I have not space in the limits of this paper to go into discussion of the principle of the narrow gauge, a question which the railway and scientific journals have been arguing with such heat for some time past. Suffice it to say here, that it involves an entire revolution in the present system of railway construction, equipment, and management. Colonel Wm. H. Greenwood, the general manager of this road and one of the foremost advocates of the narrow gauge reform, distinctly, and I think wisely, says that the principle of the narrow gauge system now does not lie in the mere distance between the rails, but is a question of general and thorough economy and retrenchment in the present system of railway management. It means lighter equipment, less useless speed, and so a perpetual saving in wear and tear, as

well as in the first cost of construction and equipping.

As a continental north and south through line, the Denver and Rio Grande is again a road of imperial conception. It wants to be and will be the iron back-bone of the continent trending the eastern base of the Rocky Mountains, the whole length of the English, American, and Spanish belts. Heretofore the vast continental railroad enterprises of this country have been east and west, and the north and south lines only short independent connections. This road is the first conception of a north and south system. With the Denver Pacific and Central Colorado and a mediated extension from Cheyenne to some point on the North Pacific on the one hand, and its own projection to the city of Mexico on the other, the Denver and Rio Grande will constitute a through north and south continental line, bisecting at right angles the Northern Pacific, the Union and Central line, the Kansas Pacific, the Atlantic and Pacific, the Texas Pacific, and any line running from the city of Mexico to the sea. With this faint outline of its scheme, we leave the reader to fill up for himself the picture of its magnificent future.

And this future of the road it is which lifts it up from the plane of men, mechanics, or trade, into the range of statesmanship and political domination. By its charter, already projected to the southern line of the Territory of New Mexico, its extension into the capital of the Republic of Mexico is only a question of time, and that time impending.

A word in feeble attempt to convey some faint conception of what these railways have done for the social life and industrial development of Colorado, I am sure the readers of the JOURNAL would open their eyes with surprise should they see Colorado as I see it to-day. Right under Pike's Peak—the hunting-grounds of Fremont and Kit Carson, the desolate land of starved and exasperated miners—I write from a comfortable, not to say elegant hotel, with all the conveniences that can be had in any Eastern town. The Italian skies, you know, the stimulating airs that blow fresh and unbreathed from the mountains you may have enjoyed; the iron and sulphur and soft water you may, or may not, have drunk and bathed in. But the scene has shifted, and the

curtain rises to-day on a picture that even the old actors of the days gone by would fail to recognize. The magnificent table-land, 6,000 feet above the level of the sea, from which, as on a magnificent monolith, 8,000 feet higher, the shaft of the eternal peak has been all taken up for building purposes, and the antiphonal ring of ax, and plane, and saw, and hammer, answer to each other all day long. Stores, dwellings, railway offices, lawyers, shops, one church, and a printing-office, cover the splendid plain that looks too handsome to be touched.

In front runs the narrow gauge railway, trending the base of the mountain and following the old trail to Mexico. Side by side come in the modern omnibusses from the dépôt and the antique cattle teams from Texas. The conductor of one and the "bull-whacker" who guides the other meet at the same hotel, and from your piazza you see them both at once—the old and the new.

I feel sure that in time, and that time soon, this place will be the greatest resort of fashion and pleasure in the country. Here are the skies of Italy, the mountains of Switzerland, the winds of France, the waters of Nassau, scenery that is kindred to the Yosemite, and all at once and within easy and luxurious reach. Here there are conditions that can be equaled nowhere else. Six thousand feet above the level of the sea—and that is our bottom land here, with 8,000 feet higher to go, if you like—the heart beats faster and freer, and you live for the pleasure of living. Again the rarity of the atmosphere enables your eyes to range for a hundred miles around, giving pictures that can be had nowhere else, while the extreme distance softens and tones the landscape until it wears the finish of a fine engraving. Lastly, for those that need them, there are natural fountains of highly-charged medical waters boiling fresh from the ground, the carbonic acid gas escaping in perpetual effervescence. Iron, sulphur, and soda abound in strong natural tinctures, and those who come to search for the pools of Bethesda will likely find them here readier than in almost any other section of the continent. Already gentlemen of culture and means have taken up the handsome sites at the mouth of the cañon and in the lonely nooks of the peaks with the views of building there

their country seats, and when built they will have residences that no millions of money could erect elsewhere. I think that before long this entire sweep of country will be covered with just such places, the seats of culture, refinement, and opulence.

Tradition has it that once in the centuries gone by there lived there a people in comfort, elegance, and a reasonably high state of civilization—the loyal Atzecs. Cortez came, the Montezuma called, their religion and their government were in peril, and leaving home and comfort and country these true lieges of a sovereign whose throne rested on the centuries, went down to the city of Mexico to fight for their traditions and flag and faith, fought and lost and died. Certain it is, that a little south of this immediate spot in Pueblo County there are traces of a civilization and of substantial opulence of which the very tradition has passed away here, and which is neither Spanish nor Indian. Certain it is, that while the Indian, awed by the visible manifestations of the hand of God, came here to worship on state occasions, they did not use it as one of their permanent hunting-grounds or winter abodes. For centuries it seems hardly to have known the face of man as a dweller, and now, at a flash, it is open to all the world, and the silence of ages is broken by all the confused orchestra of modern life, the scream of the locomotive, the busy hum of industries, the whirl of machinery, the sounds of the gong and revelry, the crack of the rifle, the voice of prayer and praise, the music of children's voices, and the quiet rhythm of happy homes.

W. W. NEVIN.

COLORADO SPRINGS, Colorado.

A SUGGESTION.—Save the tea leaves for a few days, then steep them in a tin pail or pan for half an hour, strain through a sieve, and use the liquid to wash all the varnished paint. It requires very little "elbow polish," as the tea acts as a strong detergent, cleansing the paint from all its impurities, and making the varnish equal to new. It cleans window-sashes and oilcloths; indeed, any varnished surface is improved by its application. It washes window-panes and mirrors much better than water, and is excellent for cleaning black walnut, picture, and looking-glass frames. It will not do to wash unvarnished paint with it.



NEW YORK, OCTOBER, 1874.

BUSINESS REVIVES.

THE long period of dullness and business prostration has passed. The "hard times" caused by that "cruel panic" are believed to be over. All great interests, agricultural, manufacturing, commercial, etc., are waking up. Our railways, canals, lakes, and rivers are alive with moving passengers, productions, and freight. We have had, on the whole, a good harvest. A short season remains in which to prepare for winter. Heavy rains cutting frosts, and purifying snows will soon be upon us. Are we ready? Now is the time to push. We have put our intellectual eggs into the incubator, and hope to hatch out a brood of valuable chickens for the benefit of JOURNAL readers. Who wants them?

Metaphor aside, we are maturing our plans for 1875. The late vote has given us a new view of things—new encouragement, opening our minds to the attainment of possibilities not before conceived. The future never before looked so bright for PHRENOLOGY. "There is a good time coming."

"HE WAS REVILED."

IN view of the stern duties each and every human being is called on to perform, on his way through life, let him never forget the fact, that those of high and holy motives—men who seek the good of their fellow-men—will meet with rebuffs, opposition, persecution, cruelty, and, sometimes, life itself will be imperilled. It is not long since men were hooted at, pelted with eggs, even lynched, because they opposed the extension of human slavery in this, our boasted land of liberty. To be an abolitionist in the South was considered as bad as to be a horse-thief in the North. Honest men proclaimed the truth, though struck down by bludgeons for so doing. Temperance men and women are denounced as fanatics, and have been mobbed while praying to have drunkard-making men

discontinue their bad business. Most of the apostles were put to death for preaching Christian principles, while the Author of our Religion was cruelly, wickedly, crucified. In view of these facts, can not *we* stand up manfully in defense of our profoundest convictions? *If we do know* that the use of poisonous alcohol, tobacco, opium, and other stimulating or narcotic drugs, with the entire list of quack nostrums, is not only injurious when taken into the stomach, but the direct cause which leads to drunkenness, crime, and premature death, ought we not to be brave and plucky enough to defend the right, though the devil and all his legions oppose? Aye, the want of this age is clear-minded, conscientious, honest, unperverted men and women—such as will not flinch in the time of trial. Calling one hard names doesn't make him a bad man. Reformers have been charged with infidelity, but that did not make them so. Martin Luther was called an apostate, but he was not discouraged in his work of religious reform. Priessnitz was called a cold-water quack, but his methods, to a great degree, have been adopted in all the hospitals throughout Christendom; and water dressings for wounds are now the rule, and thousands are thereby saved who would, under the old dry-lint treatment, have perished.

Progress and improvement may be seen in all countries where there is mental activity and religious freedom.

At present, we are in a state of transition from the curses of negro slavery, civil war, and the barbarities of savages on our frontier settlements. But we shall overcome all these, and in good time emerge from the darkness of ignorance, superstition, and wickedness, into the light of intelligence, a reasonable faith, good health, and true Godliness.

JUDGING OTHERS.

IT is a common saying that "we judge others by ourselves." A scandal-monger, according to this rule, believes all others to love scandal; a libertine is quite sure others are like *himself*; a thief, who succeeds in his exploits, congratulates himself that he is more cunning than others, who would have done the same things had they been bold enough. A flirt practices on others what

she supposes others would, if they could, practice on her. This is a low, selfish standard by which to judge others, but many have no higher. Can a river rise higher than its source? Can a dog reason? Can he pray? Can he forgive? There are human beings among us who still live in their animal passions, and are not developed much above their animal instincts. How can they be expected to judge righteous judgment? Can such persons come to correct conclusions? In one sense, they are still in childhood—the childhood of undeveloped intellect and of moral sentiment. One may have lived to be old and gray, like many whom we know, and still be only “boys.” In general society, how many there are, men and women in bodily stature, who need the watchful care of a guardian, and to be directed by an “over-seer.” How can such creatures do otherwise than act as children, feel as children, and be as children? Call them mental dwarfs if you will, but here they are!

We repeat, tattling gossips, prurient scandal-mongers, and malicious slanderers naturally suppose others to be like themselves. So of the libertine, seducer, thief, gourmand, glutton, miser, mischief-maker, miscreant. But there is a higher criterion than one's self by which to judge of men and things. That criterion is God. Let each, however low his conceptions, and however limited his mental or moral reach, carry his case or his cause to this higher court or tribunal, and he will obtain a judgment somewhat above that of his own poor fallible comprehension. But men, low down in development, do not often go to this high court for counsel. They go where they hope to secure a verdict in their own favor, be it right, or be it wrong. A few more just persons seek only the right, though the case may go against them.

Thus we see that, though we may ordinarily “judge others by ourselves,” there is a higher and a better standard for arriving at the truth. Let us, each of us, learn all we can in this matter of judging ourselves and one another, but let us be very careful not to misjudge—especially let us be just, and merciful as just in our judgments, always submitting the case, whether of ourselves or of another, to Almighty God, and abiding whatever decision he may pass thereupon.

BAWDY BOOKS.

WHATEVER the Young Men's Christian Association has done or has not done, it has earned, through certain of its members, vastly more than it has cost, in a single interest, viz.: in breaking up, putting down, and in rooting out from our stores, our shops, our factories, our schools, and our families tons of the vile books, papers, prints, pictures, etc., which pervert and corrupt young and old men and women into whose hands they may fall or be clandestinely placed. The *Christian Weekly* lately published a striking picture representing a wicked man luring a beautiful boy to engage in the sale of his filthy literature, and properly entitled it “The Devil's Colporteur,” and thus described him and the fiendish trade.

“The devil's colporteurs are everywhere. His societies hold no anniversaries, issue no reports, publish no statistics. But his agents are numerous, assiduous, astute. He has no prejudices against tracts nor against colportage of the sort to serve his purpose. He knows the value of illustrations to catch the eye and stimulate the imagination, and uses them in forms that would be hideous to you, but are seductive to the young.

“Sometimes these devil's colporteurs carry on another business as a cover or a companion to this. They own a newspaper-stand or a flashy book-store or a third-rate picture-store. The wares they exhibit are bad enough—worse wares are hidden away in secret places, to be brought out only on occasion. Oftentimes they do no other business. They carry their stock-in-trade under their arm. They watch on the street corners; they haunt the hotels. They judge of probable customers by their faces. They slyly exhibit to the passer-by a picture to excite the curiosity or inflame the imagination. They are the devil's ‘fishers for men.’ The reality may be seen in any of our large towns, in many of our smaller towns, any day.

“The literature itself is of a kind that can not be described. ‘The devil,’ says a charitable proverb, ‘is not so black as he is painted.’ This devil is so black that printers' ink can not paint him.

“The business is not confined to the great cities. One of the largest publishers of this literature lived, flourished, and carried on

his trade until the law caught him in its net, in one of the quiet villages of pure and Puritanical New England. There is no Garden of Eden where the serpent can not come.

"It is not a modern business. In 1744 Jonathan Edwards discovered the prevalence of this literature in his quiet parish of Northampton. He at once set to work to drive it out. There was scarcely a family in his parish that was not affected by it. His exposures, fearlessly but not wisely made, were one of the causes which led to his subsequent dismissal."

THE BAD BUSINESS TO-DAY.

It is not a small business. Since 1872, through the efforts of one man, there have been seized and confiscated 134,000 pounds of books, 94,000 pictures and photographs, 14,200 pounds of stereotype plates, and 130,000 advertising circulars, pamphlets, and songs; 106 dealers have been arrested, 20,000 orders by letter have been seized, the names of 6,000 dealers throughout the United States have been revealed by the account books of manufacturers and publishers, and the names of 22,000 persons throughout the United States catalogued and sold to dealers, as persons likely to be purchasers. On these lists are the names of many boys and young men in schools of all kind, through whom this department of literature is introduced, unknown to the principals.

In other cases the books are loaned as in a circulating library.

We sound the note of warning again and again, because so many are oblivious of the danger, because the traffic prospers only in secrecy, perishes in the light of day. To cry let it alone only echoes the cry of the devil when Christ came to cast him out. The devil still asks nothing more for himself and his colporteurs than to be let alone.

The public scarcely realize to what extent they are indebted to the New York Young Men's Christian Association for the great good it has done—is now doing, in eradicating obscene pictures and bawdy books from their midst. The work can not be fully reported, as the nature of it requires secrecy. Bad men work in the dark; they must be met and overpowered on their own grounds. Those who are willing to contribute to this eminently Christian work in money in ser-

vices, or in any other way, may do so through the above-named association. Mr. Anthony Comstock is the proper person to address. It is to him personally, more than to any other one man, this whole country is deeply indebted in this respect.

If Mr. Bergh deserves the thanks of many for his efforts to suppress cruelty to animals, Mr. Comstock deserves our thanks much more for his good efforts to save our youth from the corrupting and seductive influences of the devils in human form whom he has convicted in the courts and who are now serving out their sentences in several State prisons. Let him go on with his work, and let all good men stand behind and sustain him.

LIFE SUPPORTING DEATH—COSTLY FUNERALS.

THE *Working People* says: The last census gives some interesting figures and shows, somewhat, at least, the extent to which death supports life upon its peculiar globe. In 1870 there were in the United States 1,996 professional undertakers, of whom 20 were women. The deaths in that time were 260,673, so that to the average undertaker there fell 131 cases. Besides the undertakers there were 2,365 coffin makers, who, of course, depend upon the undertakers for sales. These classes together make 4,361 persons who lived by the deaths of 260,673 persons. Doctors and dressmakers aside, therefore, under our present methods, about sixty deaths avail to keep one person alive for a year or one dead body is a guarantee of six day's sustenance to one person, or one day's support for six persons. Or, to take another view of the case, if each of these bodies were allowed a full sized grave, the whole would occupy about 202 acres, and each of these acres would support about 22 persons for a year, which is a better yield than that of the best wheat field."

The *Richmond Advocate* says, with regard to the cost of coffins: "Was the name of an undertaker ever seen in the list of bankrupts? We have never found patent caskets in any schedule of assets exhibited by an assignee. Farmers are sold out. Brokers break. Companies collapse. Governments become insolvent. But the fashionable undertaker flourishes and is never brought to grief, except in a professional way. The dealers in metallic cases are unaffected by financial panics.

"Is it because burying is a steady unfluctu-

ating trade, or is it that there is a wider margin of profits in coffins than in other merchandise? They ought, as necessities of life, or, rather, of death, to be like other necessities, cheap. But does not the cost of a modern sarcophagus, walnut or metallic, rank among the luxuries? There is a growing inquiry whether this peculiar kind of joiners' work is not rated much above the usual cabinet prices.

"People pay funeral bills without a word. To hesitate at a single item is counted a sign of an ignoble spirit, and to squabble over the price of a coffin would entail a disgrace upon children's children. In other purchases men examine the goods and hear the prices. They pass from shop to shop, and buy only at the best bargains. But who has the heart to inquire the cost of the coffin that must receive the first-born of your boyhood friend, far less to haggle over the price put on it by the maker. The day of mourning is not a time to pass from street to street comparing these sad forms of polished wood, and setting the price of one against the other.

"There are many households in fair condition that can ill afford to lose the head of the family, and find that the burial expenses cut deeply into a year's income. Not to have a fitting funeral equipment, such as the fashion of the day requires, argues in the public mind ignorant and unworthy views, and to yield to the full tax of modern mortuary upholstery is a severe pressure upon persons even of not very limited means.

"We shall hail the day with pleasure when the mode of sepulcher shall be simple, and the laying of the dead in the earth will not heavily burden the living. When 'dust to dust' is so expensive, is it any wonder that the cremationists have received countenance, when they offer, at a trifling outlay and in the old classic fashion, to turn 'ashes to ashes'?

"Whoever will inaugurate a 'movement' against expensive funerals will be a benefactor. It will be a Christian charity for the churches to begin a crusade against the cost of coffins."

When Baron Anselm de Rothschild, the possessor of \$200,000,000, recently deceased, was buried, the utmost simplicity pervaded the ceremonies. There was no display of expense. The hearse was drawn by two horses—four plumed and stately steeds are quite common in this country on the occasion of the interment of some pretentious body—and a few servants walked in quiet order behind it.

There is as much ostentation, display, and vanity in a modern fashionable funeral as in

anything else; but it is in bad taste, and ought to be frowned down. It is for the living, rather than for the dead, our means, our energies, and our best services should be given. If simplicity and economy are anywhere in good taste, it is in disposing of the dead, whom we can no more benefit, however much may be expended on their remains. A decent, inexpensive burial is most consistent with moral respect and honor.

PUT "THE RIGHT MAN IN THE RIGHT PLACE."

HERE is good advice of a non-partisan spirit, from the *Norcross* (Georgia) *Advance*, and which all right-minded men—and women—will indorse. But will they act accordingly? Let us hope so. This *Advance* says:

"Good congressmen, good legislators, good governors, good county officers, are calculated to make a good government and a prosperous people. Then push ahead with the battle-cry, 'Our country's highest good,' fighting for the right, and success will certainly attend you, and a new era will dawn in old Georgia."

It further remarks, in the same strain:

"In view of the coming elections, it behooves every honest, true citizen to consider well upon whom he shall bestow his suffrage. Men can not be too careful in regard to whom they place in official position, no matter how small that position may be. We should look to the general standing of a man, whether his past career has been one of evil or of good works; whether his understanding of the position to which he aspires is adequate to the performance of his official duties; whether his honesty and integrity may be relied upon—in short, whether he would be 'the right man in the right place,' should be carefully considered before voting for a man to occupy any position, either in County, State, or General Government."

Sound doctrine, that, and we wish, yea, we devoutly pray, as we love our country and its institutions, that all good men will see to it that the above suggestions be rigidly adhered to. It is further suggested:

"Now let the people gird on the armor of principle and care, and search out men who are in every respect fitted to hold office; and when such a man is found, let every honest citizen, who has any interest in the good management of public affairs, work for his election in all honorable ways.

"If this be done, a great change will be seen all over the country. We will see, instead of a broken commerce, our fair land with abund-

ant means and controlled by men of true worth. We will see, instead of an over-taxed, discouraged and oppressed people, a people energetic and prosperous. Look at it, good people, and calculate the benefits which will arise from putting good men in positions of trust and honor. No one will help you unless you first show a spirit to help yourselves. Give the worn-out political hacks the go-by. Throw aside all petty party prejudices, work to the front, and try to bring about a change from what has been—a change for the better. There is sufficient room for grand improvement.”

For a Georgia paper, this may seem radical; but we indorse every word of it, and go a step further, we would neither “marry a man if he drinks,” nor elect him to any office. We would not trust a drunkard to make laws for sober men. Nor would we elect any man to office whose body or brain is muddled, befogged, or narcotized by tobacco. We would have only *clean, sound, honest, goodly men* in offices of trust, or to legislate for American citizens.

A REFORMATORY PRISON FOR WOMEN.

THE Legislature of Massachusetts passed a sensible act, during its session, when it appropriated a sum of \$300,000 to establish a *reformatory* prison for women. The new law reads like a benediction, in the interest of unfortunate women, who, under pressure of circumstances, commit unlawful acts, for which, the law requires that they be placed in restraint. Not a word is said in this law about “punishment,” and we congratulate the law-makers of the old Commonwealth, on the fact that it is for REFORM, rather than *revenge*, that this class is to be provided with a new and improved home. Read this:

The commissioners of prisons are hereby authorized to select and determine a plan, and to purchase an eligible site within the limits of the Commonwealth, and to cause to be erected thereon a suitable prison for a reformatory prison for women convicts, with accommodations for five hundred prisoners, together with such household accommodations for the superintendent and family, and for subordinate officers, as said board of prison commissioners may deem necessary.

And this:

As soon as the commissioners of prisons have erected a prison agreeably to the provisions of this act, and the same is ready to receive, safely keep, and employ the convicts committed to the same, the governor shall issue his proclamation establishing the reformatory prison for women, and thereupon all female convicts duly

committed to the same, or removed by order of the commissioners of prisons as hereinafter provided, shall be kept imprisoned, employed, and detained, conformably to the sentences or orders of the courts, and the rules and regulations of said prison duly made and provided.

All the officers of this prison, save only the superintendent, treasurer, and steward, shall be women, at the discretion of the governor and council, matrons, teachers, chaplains, etc., should be selected with reference to their knowledge of human nature, and their special fitness for such positions. We predict the best success for this reformatory institution, and see clearly that other States must soon follow the lead of Massachusetts in prison reform, as they have in common school education and in hundreds of other good examples.

WHO WILL DO IT?

THE field we occupy in spreading a knowledge of human nature is broad, and waves with a harvest which is ripening for the gathering hand. No subject appeals more invitingly to strong, courageous, and earnest men and women. Our subject is mind and character, human growth and human weal. As it deals with the central controlling entities of man's being, it ranks in reality above all topics outside of it and subsidiary to it. Of course it is honorable, because necessary, to construct roads and bridges for transit, houses for habitation, clothing to shield the body, and to raise food for its nourishment; but he who deals with mind, as teacher, preacher, and phrenologist, has vocations of most importance. He who studies the actions and laws of mind, or educates it to act with wisdom, skill, and facility, or who guides it to high moral aims, should regard his high calling with proper respect, and as most useful and responsible. He or she who would best serve the world should select such a position as will use the talents to the best advantage, whether it be called high or low; but may we not “covet earnestly the best gifts,” and seek to do that which has the highest and the best aim?

We do not invite to our profession those who lack the natural talents, the industry, and the integrity to do themselves, their clients, and their subject fair justice by attaining respect and success. We crave perfection

but do not expect it; industry, good sense, fair education, and honesty, we demand; nothing else will benefit mankind or bring to the worker such compensation in respect, honor, emolument, and the consciousness of doing good as a man or woman needs, and in right relations to life and labor may expect.

Who will enter the field of practical Phrenology and teach mankind the true philosophy of mind, what belongs to human nature in the way of faculty, propensity, and sentiment, and how these may be most wisely and successfully trained to usefulness and happiness?

This field of inquiry embraces also philosophy and the laws of health and physical improvement and perfection.

Moreover, he who understands the mechanism of mind and body stands at the center of man's being, usefulness, and happiness. The choice of pursuits for the young, the best way to train and educate each person, and how to lead all men in the special path best suited to make the most of the endowment of each, however various.

This would place every person in the right relations to self, to culture, to business, and to marriage; and if applied for half a century to the human race in the most favored countries, it would be doubled in power and in the legitimate means of happiness.

SCORLÆ BRICKS.—For many years experiments have been made with the view to utilize the waste of iron-smelting. Latterly some success has been achieved. The *Colliery Guardian* thus describes the process adopted by the Tees Company, of Darlington, England: There is planted at the entrance of the kilns an apparatus which may be best described as a revolving table, on which are a number of wrought-iron brick molds. A line of rails, some twenty or thirty yards, runs from the blast furnace toward this table, along which is brought the slag liquid in boxes or bogies. These are placed in such a position that the molten liquid runs into the mold, and as each mold is filled, the table revolves around. The time required for the slag to set is about two minutes. While it is red-hot the bricks are taken out of the molds and put into the annealing kilns or ovens, where they remain for three days, after which they are perfect, cool, solid,

and hard, and ready for use. The company contemplate erecting an apparatus near the blast furnaces, so that the slag can run into the molds direct, and instead of the revolving table, they are going to adopt the principle of a horizontal movement, so that the molds will be carried along by a chain action, something after the mode of the river dredgers. The manufacture of scorlæ or slag bricks is now an accomplished fact, and this new industry must tend to diminish the cost of making pig iron, wherever it is brought into requisition.

FAIR HAVEN, ON LAKE ONTARIO.

THE dreams of early settlers, of forty years ago, are now being realized. Adjoining the town of Sterling, in Cayuga County, near the eastern line of Wayne County, New York, fourteen miles west from Oswego, thirty miles north from Auburn, and about the same distance north-west from Syracuse, lies one of the most beautiful, safest, and most capacious harbors on Lake Ontario. The bay, formerly called Little Sodus, now Ontario Bay, is two miles long, a mile wide, with fine bold shores, deep clear water, a splendid entrance from the lake, and is, in all respects, as good a harbor as nature and art can make.

The new Lake Shore Railway, which is being pushed forward to completion, and extends from Oswego to Lewiston, near Niagara Falls, where it connects with the Great Western and other roads to the West, will form a short and direct route, probably *via* Hoosic Tunnel, to Boston and the East.

Besides this new East and West Trunk line, there is an excellent North and South line—the Southern Central—terminating at the bay, and reaching south to Owego, on the New York and Erie road, and thence to the great Pennsylvania coal regions, and so on to Philadelphia, Baltimore, Washington, and the South and West. This new road—the Southern Central—crosses and connects with the following railways: The Lake Shore, near Ontario Bay; the New York Central and the Erie Canal, at Weedsport, and the New York Central—old road—at Auburn. It crosses the Ithaca and Courtland at Freeville, and the New York and Erie Railroad at Owego, and connects with the Lehigh Valley for Towanda, Pittston, Easton, Philadelphia, Baltimore, etc.

Besides these water and railway advantages a valuable iron ore bed was recently discovered near the bay, and is being worked. The ore is,

at present, shipped to Syracuse for smelting, but a furnace will probably soon be erected near the bay. There are salt springs in the immediate vicinity, which, it is believed, will ere long, be utilized. There are two steam saw-mills and a planing-mill in operation at the bay. There are also churches, school-houses, shops, etc., convenient. The place is growing. Complaint has been made that farmers owning the lands around and near this beautiful bay, refused to sell, and that a stranger wishing to settle here could not secure a foothold. This is no longer the case, as will be seen by the following item from the *New York Evening Post* of a late date:

"LARGE SALE OF LAND.—Fair Haven, in Cayuga County, New York, is the northern terminus of the Southern Central Railroad, and is an important coal-shipping point on Lake Ontario. One thousand tons are shipped every day, mostly to Canada ports. On Wednesday last an auction sale of land was held, by order of the Supreme Court, of the Cottage Farm, fronting on the bay. The sale began at 10 o'clock in the morning, and lasted until seven o'clock in the evening, when 378 plots were sold, at an average price of \$70 each."

Purchases were made by many who intend to improve the property immediately, and thus give a fresh start to this promising young place.

Is not this the point for Boston to tap the Great Lakes? Where can be found a better harbor? What shorter cut can be made to the great grain markets of the West? and where, in all the land, is there a more healthful or charming place for a residence? The grounds are high, rolling, well-drained; abounding in pure water, good soil, fine scenery, and all things which delight the eye, feed the imagination, and satisfy the senses:

We repeat, the dreams of the early settlers at this beautiful bay, of forty years ago, are just now being realized. Fair Haven must become a place of business importance and of resort for recuperation, pleasure, and rest. It is in every way one of the most delightful places on the shore of the grand old Ontario.

SEVERE MEASURES.—A new temperance apostle has made his appearance in New York, preaching a new temperance gospel. He takes no stock in moral suasion, and puts no faith in the efficacy of prohibitory laws. His plan is to operate on the liquor drinker instead of the liquor seller, his theory being that as a cat may be beaten until it is afraid to steal any more cream, a drunkard should be terrified into obedience of the laws governing temper-

ance. His plan is this: Disfranchise the intemperate man from his rights as a citizen on first complaint. On the second complaint, let him be condemned to sweep the streets, and on the third complaint compel him to wear an iron collar that will be symbolical of his vice. Put rich men and the poor and degraded together, and make of them a brace of scavengers. The necessity for cautioning the ladies not to persuade their gentlemen friends to take wine on New Year's Day will then be no longer essential, for, of course, they would not like to see their "dear Augustus" in charge of a policeman shoveling snow next morning.

[A man who has become the victim of rum and sincerely desires to escape from the terrible bondage, would willingly submit to severe discipline in order to recover his manhood. There would be profit to the individual and to the community if the above-proposed penalties were put in force.]

CAUTIOUSNESS AND BENEVOLENCE LARGE.—The Superintendent of the Erie Railway has just issued an order to his men, which certainly has the "ring of the true metal." He tells them that the accidents which have lately occurred on the road have been the results of gross carelessness on the part of the employes, and warns them that hereafter he will immediately dismiss any man who is found guilty of neglect, which might lead to an accident. The employes are also strictly forbidden to use any intoxicating drink while on duty, the penalty for a violation of this rule being the same, a peremptory discharge. The attention of the employes is called to certain rules which have been issued by the management, and are reminded that it is designed to "deny employment to all but first-class railroad men."

[If the management also forbid the use of tobacco, they will find their men to have clearer, quicker, and sharper minds in the discharge of their duties. It is a great gain to have alcoholic liquors excluded, and the traveling public will be duly thankful for the prohibition. Will other roads follow this good example?

THOSE who would fit themselves to practice the phrenological profession, or would learn the science for its uses to them in other pursuits, should, if possible, avail themselves of our Course of Instruction, which opens its next session November 4th. Circulars stating particulars sent by mail to all who apply.

AGRICULTURAL HINTS.

Keep the Milk-Room Sweet.—Milk and cream are great absorbents of the gasses and flavors that may be floating in the air. We have been in some kitchens in which the milk was kept in winter for the sake of warmth, and was exposed, of course, to the fumes and gases of the daily cooking. Milk kept under such conditions must acquire an unpleasant flavor, and must impart it to the butter. What is worse, as the casein of milk has a great tendency to commence decomposition while in the fluid state, this tendency is doubtless hastened by the germs of decay which are constantly floating in the atmosphere of a kitchen. Some dairy-women say that they can not make sweet butter in winter. It is not to be wondered at if they expose their cream a week before churning to such contaminating influences.

Here are a few of the reasons why horses are whipped: For stumbling, owing to careless and reckless driving; for slipping down, owing to smooth shoes; for shying, when frightened; for any vigorous effort to be relieved of torturing flies; for the breaking down of the vehicle; and, sixthly, because the wind blows off the driver's hat.

Keeping Winter Apples.—A member of the Michigan Pomological Society stated at the late Adrian meeting, that he was very successful in keeping winter apples, and had sound, fresh fruit in May, by the following treatment: He picks the fruit in October, and places it in heaps in the orchard, covering them with hay. These heaps remain untouched till December, the slight moisture of the earth and the few inches of hay preventing any injury to the apples, even during sharp freezes. They are then assorted and packed in barrels, which, after heading up, are placed in a cold cellar, which is kept at a temperature of about 32°, and if it should happen to be a few degrees lower for a short time, the protection of the barrels will prevent injury.

A Woman's Tact.—Mrs. Briggs, who lives near Xenia, Bourbon County, was left by her husband this spring in care of the farm. This summer the chinch bugs destroyed her wheat field, and then started for the oats which grew near. She had a deep furrow plowed with the perpendicular side next the oats. This obstructed the bugs sufficiently to gather them in large numbers in the bottom of the furrow.

For two days the whole force of the farm was employed in heating water and scalding them. The bugs were destroyed and the oats saved. The first instance on record where a crop has been saved from these unwelcome pests by any artificial means. [What *right* has *she* to interfere in *man's* business?]

A Neatly kept cellar is a pretty good guarantee of health of the family whose members are breathing the air from it day and night. Everybody believes in having pure air to breathe; but we are sorry to tell the truth, that thousands are breathing impure air on account of foul cellars. What are the essentials of a good cellar? It must be dry; it must have stone walls outside and division walls of either stone or brick; the floor of cement upon a foundation of cobble stones previously imbedded into the earth by means of a heavy maul, handled by two men; plastered ceilings and walls; complete ventilation by means of large windows. If these points are secured, the cellar become some of the most important rooms in the house.

Crop Prospects in Europe.—The latest mail advices from Europe, in regard to the crop prospects, say that they are not so good as at the last preceding report. Although the French wheat crop is a good average one still, the hopes that it might be classed among the rich crops will not be realized. Rye and barley will yield a good quality, but rather limited quantity. The complaints about oats have, in consequence of the heat, become more numerous from certain parts. From Vienna the official bulletin says the continued July heat has done harm in only a comparatively small part of the empire, but was pretty damaging to the barley, oats, and feed. Rye and wheat look well, and corn is also looking well.

Horticulture for the People.—I feel desirous on this occasion to urge the truth that an intelligent attention to horticulture will enable any man who owns a square rod of land to provide more of domestic comfort, and to gather around his home more of real, substantial attraction, than by an equal amount of labor and expenditure in any other way. I have seen men build for themselves dwellings costing from \$5,000 to \$10,000 or more, who seemed wholly unaware of the almost infinite amount of attraction which might be added by ornamental planting, and by the cultivation of the

yearly circle of fruits. A neighbor built a handsome brick mansion which would now cost \$15,000. He then went to a neighboring nursery, and by a great stretch of liberality, as he thought, expended in ornamental trees and shrubs the huge sum of \$5, currency. He had been taught, or had taught himself, to believe that it was a waste of funds to buy trees that were merely "good to look at," although he had put several thousand dollars in piles of brick and stucco for no other purpose whatever than show, for his house would have been really more convenient and comfortable if he had reduced its size and pretensions, and made it cost at least \$5,000 less. A twentieth part of the amount thus saved would have given him a valuable fruit garden, and have invested his dwelling with a paradise of rich foliage, and with the bloom and perfume of flowers. The truth was, he had never read a horticultural book or journal, nor cultivated the dormant taste, often smothered down and undeveloped, which naturally exists in the bosom of nearly every human being. I say nearly every one, for there seems to be a few in whom from some deficient phrenological development, or from some other cause, a refined taste for these beauties of nature seems to be totally extinct—and such should claim our sympathy for this natural deprivation. In the case I have mentioned, the taste of the owner of the elegant brick mansion, if he had possessed it, seemed hidden far down under a ponderous heap of greenbacks, bonds, and mortgages, which he had worked thirty years to accumulate. I have had occasion to contrast this bleak and stately mansion with some neat and small dwellings erected at a tenth the expense, surrounded with all the attractions of soft masses of green foliage and clustering flowers.—*From an Address by Prof. J. J. Thomas.*

Laying Hens.—Treat hens kindly if you want them to lay eggs. A petted hen is a singing hen, and a singing hen is invariably a laying one. The housewife who feeds her flock of a dozen petted fowls out of her apron, will have eggs to spare; when her neighbor, who counts his hens by the hundred, but pelts them about his premises with sticks and stones, and sets the dog on them whenever he catches them in the stables, will not have eggs for his own use. Avoid chasing or frightening fowls, it injures them. If you want any to kill, take them quietly from the roost at night and allow them neither by flutter or scream to disturb the rest. If you do not want to kill them the

same evening, put them in a coop, or other suitable place, where they can be had next morning without further trouble.—*Lancaster Farmer.*

To Protect Sheep Against Dogs.—

So many thousands of sheep are destroyed annually by dogs, that measures for the protection of their woolly property are eagerly welcomed by farmers. An English paper recommends the putting of bells on sheep to protect them from the attacks of dogs. The plan recommended is in use in parts of Scotland and England, and is successful. Surely so cheap, simple, and practical a method of protecting sheep should be more extensively tried in this country than it is, where the destruction of these animals by dogs is said to cost millions of dollars annually.

SCIENTIFIC, LITERARY, AND INDUSTRIAL SOCIETIES.—Here are a few of the more prominent, as compiled by the *Industrial Monthly*:

AMERICAN SOCIETY OF CIVIL ENGINEERS.—Julius W. Adams, President; Gabriel Leverich, Secretary. Rooms 63 William Street. For list of regular meetings see Transactions. Non-members admitted to meetings held on the third Wednesday of each month, at 8 P. M.

LYCEUM OF NATURAL HISTORY.—Dr. John S. Newberry, President. Rooms 64 Madison Avenue. Meetings every Monday evening—first Monday of the month, business; second, chemical section; third, geology; fourth, natural history. Meetings free. Visitors welcome.

AMERICAN GEOGRAPHICAL SOCIETY.—Chief Justice C. P. Daly, President; E. R. Straznicki, Secretary. Room in Cooper Institute. Meetings on the second Tuesday of each month. Admission by a card from a member.

ACADEMY OF DESIGN.—Corner of Fourth Avenue and Twenty-third Street. T. Addison Richards, Secretary. Department of schools, free; department of exhibitions, admission 25 cents.

METROPOLITAN ART MUSEUM.—108 West Fourteenth Street. Admission 25 cents; Mondays, free.

ARTISTS' FUND SOCIETY OF NEW YORK.—Annual sale of works of art, contributed by members, for its benefit. Alex. Lawrie, Secretary, 212 Fifth Avenue.

AMERICAN SOCIETY OF PAINTERS IN WATER COLORS.—Annual Exhibitions. Admission 25 cents. J. C. Nicoll, Secretary, 51 West Tenth Street.

HISTORICAL SOCIETY.—Corner Second Avenue and Eleventh Street. Admission by card of introduction from a member.

POLYTECHNIC ASSOCIATION OF THE AMERICAN INSTITUTE.—Prof. S. D. Tilman, President. Room 24 Cooper Institute. Every Thursday evening at 7.30. Admission free.

FARMERS' CLUB OF THE AMERICAN INSTITUTE.—N. C. Ely, President; J. W. Chambers, Secretary. Room 24 Cooper Institute. Every Tuesday at 2.30 P. M. Admission free.

YOUNG MEN'S CHRISTIAN ASSOCIATION.—Corner of Fourth Avenue and Twenty-third Street. Meetings every fourth Monday of the month at 8 P. M. Free to all young men.

LIBERAL CLUB.—W. L. Ormsby, Jr., President; D. T. Gardner, Secretary. Plympton Building, cor. Ninth and Stuyvesant streets. Every Friday evening at 8 o'clock. Admission free.

MERCANTILE LIBRARY.—Astor Place. Membership \$5 per annum; to clerks, \$4. For list of lectures address M. T. Peoples, Librarian.

ASTOR LIBRARY.—Lafayette Place. Free.

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

OVER-STUDY.—Could not persons suffering from over-study and mental labor be cured after a lapse of eight or nine months? How long would it be likely to require, and what is the proper treatment? Can one suffering from over-study be cured if he continue his mental labor?

Ans. Suppose a horse were overworked, and he were to become thin and weak, could he be built up in flesh and strength if the same extra labor were continued? You find it easy to answer "No" to such a question. So long as you continue to over-study, you can not be cured; and the best way to overcome the difficulty is to stop studying.

We know a young man who failed to grow, as a boy, and his father sent him to the country to work on a farm three successive summers, otherwise his brain would have absorbed all the vitality, and he would have remained small and weak, and would probably have broken down utterly, and been unable to pursue his studies and graduate.

The remedy, then, is to cease irritating and exciting the brain by study, and engage in something that requires just mental action enough to keep the mind from getting rusty.

Sleep as many of the twenty-four hours as you can. Eat plain and simple food, especially that which sustains the brain and muscles. Wheat ground without sifting makes the best bread—in fact, it is good food. You must avoid the superfine flour bread, tea, coffee, and sugar. Eat ripe fruit liberally, also vegetables, so as to keep the bowels free. Bathe sufficiently to keep the pores of the skin open and healthy. Avoid spices, tobacco, and alcoholic stimulants. Six months' time thus living will be likely to bring you about all right. Then study with moderation, exercise abundantly, and continue to live temperately, and if you are not too far gone, you may hope for recovery. Medicines can do you no good.

"OVER-WORKED BRAINS."—A correspondent asks us to reconcile the discrepancies among different writers; one claiming we have too much mental activity, and another that there is no danger of harm from brain-work. We suppose the question may be summed up in this way: When the vital functions are weak, as in small chests, stomachs, hearts, lungs, etc., and the heads are large, there will be too much wick for the small lamp, and the oil—of life—will be exhausted through head-work as fast as it can be generated; hence one may soon become exhausted. But so long as the lamp remains full of oil, it will continue to give light, according to the *quality* of the lamp and its contents. Big bellies and small brains do not suffer from over mental activity; while big heads and small bodies *may* become prematurely exhausted.

WHAT was the date of the different petitions from the Colonies to the home government, asking redress for their grievances and for a proper acknowledgment of their rights?

Ans. The date of the first petition was October 25th, 1765, and was put forth by the following Colonies: Massachusetts Bay, Rhode Island and Providence plantations, New York, New Jersey, Pennsylvania, Delaware, and Maryland. The second petition was from the First Continental Congress, composed of delegates from New Hampshire, Massachusetts Bay, Rhode Island and Providence plantations, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina. The third petition was dated July, 1775, ten years from the date of the first, and was drawn up by the Second Continental Congress, representing, in addition to the Colonies named in the last list, those of South Carolina and Georgia.

SELF-EDUCATION.—Read Smiles' "Self-Help" as a beginning of your course, and profiting by the excellent advice of that work, you may proceed to the study of other authors. Recently a book adapted to the use of young men situated as you are has been published and received with much favor by literary critics. It is entitled "How to Educate Yourself." The price is 75 cents. This could be read by you in connection with "Self-Help," or without it. The price of the latter is \$1.

UNDER what pretence was the notorious Stamp Act issued, and what were some of the duties imposed.

Ans. The ostensible purpose of the English government in this extortionate taxation was to create a fund to be held in reserve for the use of the

Colonies, as occasion might require, "for their defense, protection, and security." The rates of taxation were particularly high on any agreement or written instrument, of whatever character. All newspapers, pamphlets, almanacs, calendars, and advertisements were taxed under the law, every pack of cards one shilling, every set of dice ten shillings, etc.

ADIPOSE.—What causes those little worms in my face? They are sometimes called "grubs," I believe. There are white, with a black head, and are about from a sixteenth to an eighth of an inch long. They sometimes fester or swell up, and are quite sore. Is it best to squeeze them out?

Ans. They are neither worms nor grubs. They are simply little particles of fatty matter working through the skin, and the "black heads" are nothing more than dirt which sticks to the fat. They may be squeezed out or let alone—no harm will come either way.

THE LATE JUDGE CHASE.—Can you inform a law student where he may obtain a bust—life size—of the late Hon. S. P. Chase, and the price?

Ans. We have a copy in our phrenological cabinet of the bust, and can make duplicates at \$10 each.

ALCOHOL—STOMACH—BRAIN.—Hubbard, Trumbull Co., Ohio—*Dear Sir:* Have you any plate, illustrating the effects of alcohol on the stomach and brain sufficiently large to use in the lecture-room? If not, where can they be had? I am lecturing upon the subject, and want to cover the ground indicated. Yours etc., Q. A. T.

Ans. We have exactly such plates—or, rather, paintings—and they are the most striking, effective, and convincing arguments which can be offered on the subject. We have a series of six stomachs, showing the organ in a healthy state; then in an excited condition by moderate drinking; then inflamed by hard drinking; diseased by continued abuse; poisoned; condition of the stomach in *delirium tremens*; and also after death. We have also a series of heads and faces to correspond. For style and price, see notice in the "Publisher's Department," under the head "For Lecturers," in the present number.

ELEMENTARY PHRENOLOGY.—I have just been reading a letter from the Hon. Horace Mann to a young lawyer (which is my situation), wherein he advises him to make PHRENOLOGY his first study, and to master it. He says, "You should read some elementary book on the science first, then master Combe's 'Constitution of Man.'" I have concluded to follow the advice of Mr. Mann, and wish to learn what "elementary book on the science" should fill the station he points out?

Ans. We commend the following works, in the order named: "How to Read Character," \$1.25; "Education, Founded on the Nature of Man," \$1.50; "Natural Laws of Man," 75 cents; "Mental Science," \$1.50; "New Physiognomy," \$5; "Combe's Constitution of Man," authorized American edition, \$1.50. Either or all may be sent by return post at prices annexed.

HERE are questions and answers of a theological turn, which have appeared in the *Christian Union*, and as they may interest readers of the PHRENOLOGICAL JOURNAL, we transfer them:

SHAPE OF HEAD AS AFFECTING MODES OF WORSHIP.—Is the flat-headed Teton as capable of living in and enjoying the higher life of faith as the individual is whose head is more largely developed in the region of Veneration?

Ans. What is the "higher life of faith?" Is it the reception of a divine luminousness, poured into the soul mechanically, without the exercise on the part of the recipient of reason, will, or emotion? Then men are like so many measures—gills, pints, quarts, and so on—and of course a gill will never equal a quart. But if all religious life consists in the action of the mind and soul according to those laws which God has made, then there may be expected just such differences of *moral capacity* as are found to exist in other departments of the mind. All men are not alike capable of moral ideas or feelings, more than of poetical, mathematical, musical, or logical. It is for each man to develop the "talents" given him, whether one, five, or ten.

DO ALL BUDS BLOSSOM AND BEAR FRUIT?—Suppose we die in infancy, will development go on to completion in the future state?

Ans. There is absolutely no *knowledge* given, or, as far as we now know, attainable on this subject. It is a field for illimitable speculations. Analogies, probabilities, possibilities, may be multiplied, without gaining a step of positive knowledge. "It doth not yet appear."

ACCOUNTABILITY.—Is not a bad man who prays to be good more acceptable with God than one who is not so bad, and does not pray?

Ans. All men are primarily measured by the Divine standard, that of perfect manhood. Men differ in endless degrees in their approach to this ideal, and this difference classifies them upon higher or lower planes. But we also measure men by another standard, viz., by the effort which they put forth to resist evil and to perform good. In one way a man may be better than another, but in another way not so praiseworthy. A scholar of bright parts with very little study stands easily at the head of his class. The boy next below studies ten hours to the other's one, and is yet inferior. Judged by the standard of perfect knowledge, the first is first; judged by the standard of resolute will and effort, the second is first. The question does not discriminate that there are two standards, and that the terms, better or worse, higher or lower, are confusing because applied to different elements.

DOUBLE CROWNS.—L. M.—The double crowns you speak of are the rounded developments of large Approbativeness. The book entitled "Genesis and Geology," written by Rev. Joseph P. Thompson, can be understood by common people. It is a plain, clear statement of the

scientific theory of the creation of the world, and its growth or changes to the present time, and a comparison of it with the Biblical account. The price of the work, by mail, postage paid, is one dollar.

POLITICAL SCIENCE.—What works would you recommend on the science of Government and on Political Economy? F. H. L.

Ans. Alden's "Science of Government," price, \$1.50; Carey's "Social Science," \$2.25; Sterne's "Representative Government," \$1.25; Lieber's "Civil Liberty," \$3.25; Smith's "Political Economy," \$1.50, are excellent works on the subjects named.

SWEDISH.—Can you furnish Phrenological works in the Swedish language?

Ans. We are not aware that such can be obtained in this country. It will give us pleasure to publish a complete list of such works, naming publisher and prices, if any one will furnish it.

What They Say.

A NEW LOCATION FOR FAITH.—It would be a kind of a miracle should any one read the PHRENOLOGICAL JOURNAL six or eight years and not *feel* its teachings or love Phrenology. The writer brought a skeptical mind to the first copy seen some eight years since, but he is now as firm and thorough a believer in Phrenology as in the divinity of Jesus. Perhaps the greatest objection raised against this science is found in its *seeming* to materialize everything, from the fact that nothing, absolutely nothing, is or can be done by man unless the brain is first used.

Having already lectured on Phrenology, God permitting, I shall again do so. I picked up an armful of PHRENOLOGICAL JOURNALS one evening, and while trying to find something about alcohol, my eyes were attracted by an article headed "Faith, its Philosophy," in the April number for 1870. After reading I found that the writer, like many others, mixes Faith so nicely, that no one can find the *egg* in the pudding, except a piece of *yolk* near the end, where he quotes Pollock:

All faith was *one*; in object, *not in kind*

The difference lay. The faith that saved a soul

And that in which the common truth believed

In essence were the same.

In a happy moment the thought came that Faith must be a proper faculty of the mind, inherent in every man; that it is a judge, while the reasoning powers are the sheriffs, bringing in prisoners for *him* to take into favor or condemn, and that, like other judges, he makes sometimes serious mistakes, being fallible. If this is so, Faith must have a location, and that this location is indicated by the *star*.

Perhaps the first objection to my theory is that such location would be too low; that Faith

properly belongs to the higher faculties. I answer, long before the religious powers are fully exercised, *if ever*, by the child, it uses faith that its parents will provide for its wants. Thousands of men are not, and never *will* be, religious, yet what act do they perform and not use faith? None. I hold that James Fisk had as much, if not more, faith than John Wesley, and for this reason, that speculation, right or wrong, requires faith, and often a large amount, that it will succeed. The difference in the lives of these two men lay *not* in their faith, but in the use they made of it.

See here, sir, says Alimentiveness to her lord: if you want me to be your most obedient servant you will have to feed me properly. The master takes Faith by the hand, wakes up Tune and Time, gathers a few pupils, instructs them, receives his pay, and soon the aforementioned *plump* beauty is satisfied. But why take Faith? does not the master know by previous experience that by compelling Time and Tune to go to work he can please Alimentiveness? no, no; it may be his first trial, or if not, he must have faith that these two can or will work successfully.

"What's that man doing in yonder field?" "Why," says my friend, near by, "he is sowing wheat for next year's crop; his Acquisitiveness is well pleased with the fine crops he reaps; he knows wheat-raising pays; he is sure of a large return." "Sure, did you say? does he know?" The wind blew, the floods came, and the hail beat upon that field before harvest, and the farmer reaped straw. Through faith we sow in tears that we may reap in joy terrestrial fruit. Sublimity rises in his grandeur; Ideality in her beauty, sighing sometimes to behold some grand Niagara Falls, some grand and beautiful Yosemite; their master gratifies their wishes, but not before consulting Faith; the iron-horse, you know, might suddenly, by the way, give up, not its ghost, but its steam, and

"Dangers thick stand all around,
To hurry mortals home."

Now, dear PHRENOLOGICAL JOURNAL, I admire the far-seeing genius that placed a star just behind Tune, for that star seems to me to be far-seeing Faith, the morning star that shines in the horizon and throws its light and illumines every part of that wonderful arch. WM. HORNE.

TESTIMONIALS.—S. R. WELLS—DEAR EDITOR.—I read in the JOURNAL to-day the inquiries of a young man to you: first, "Is Phrenology believed in by our best men?" Are you too modest to say, Yes, when you can give us hundreds of names of legislators, divines, lawyers, editors, and men of worth and fame all over our country, as I know you can? Secondly, "Can Phrenology be proved?" *Certainly*, if seeing is believing? Thirdly, "Does it lead to fatalism?" If the asker had read the JOURNAL, as I have, for the last six years, he would not ask that. And you add,

"Reader, what has Phrenology done for you?"; For one, I answer: It has made a man of me' taught me to understand my own nature, its defects, and point to their cure; to understand human nature, society at large; the truths of religion; thus, next to the Bible, has been chief in carrying me through early manhood, and the formation of character. Yours, respectfully,

H. M. KENNEDY.

WHO BELIEVES IN PHYSIOGNOMY?—

The following is a copy of a letter from a New York State Senator, and explains itself:

FRIENDSHIP, N. Y., *July 28th, 1874.*—DR. JAMES HEDLEY—*Dear Sir:* I wish to offer you my humble tribute of thanks for the superior entertainment and instruction received during the course of lectures you are about to close. Henceforth, the science of Physiognomy will not only have a charm for me, but I shall regard it as a necessary requisite toward the proper preparation of the young for all the various relations, and especially the avocations and professions of life.

I deem it but just to add that I have seldom met your peer in point of scholarly attainments, accomplished oratory, thrilling word-painting, and impressive delineation of character, all heightened and beautified by an earnest Christian faith.

Gratefully yours, A. J. WELLMAN,
Member New York Senate.

FUTURE POSSIBILITIES.—MR. EDITOR:

In the July number of the JOURNAL Mr. H. W. Davis refers to an article written by J. W. Deem about "Future Possibilities," which was published in the May number. He quotes, "I firmly believe that the time is not far distant when the telegraphic system will be superseded by the science of thought. Correspondence by letter will shortly be unknown. Friends, though hundreds of miles apart, can communicate with each other through the medium of thought. Then it will be impossible to deceive," etc. Mr. Davis says, "If Mr. Deem or any one else believes it to be probable, I would like to read their reasons for such a belief in your valuable JOURNAL."

I do not exactly agree with Mr. Deem in regard to the telegraphic system being entirely "superseded by the science of thought." Nor that "correspondence by letter will shortly be unknown." But I do believe that friends (not strangers) can and do communicate with each other through the medium of thought and will-power, "though hundreds of miles apart." My reasons for such a belief are that I have communicated, and I am now in communication with friends by will-power and the science (?) of thought. All persons can not communicate, only those that are properly educated, and are susceptible to impressions.

J. W. V. S.

ANOTHER CLERGYMAN'S TESTIMONY.

—When I was sixteen years old, my step-mother, who was something of a phrenologist, putting her

hand across my forehead, said to a friend to whom she was speaking, "See how narrow he is here, compared with that one," meaning my brother, who was three years younger than I, and whose forehead was unusually large and prominent. "There is nothing like the intellect here that there is there," continued she. "That one will make a fine man." This was injudicious, and pained me greatly; nevertheless it was true. We have a portrait in the family, taken when I was a boy, which shows the head to be narrow in that region.

My brother was always reading, while I was all for romping and play. From my eighteenth to my twenty-fourth year I studied hard, preparing for the ministry, the result of which was that my forehead widened and developed, and is now quite as large and full as my brother's, who was so much larger than mine then. Four years ago I obtained a phrenological examination at the office of the JOURNAL. Four organs were shown me to be rather deficient, all of which, by special attention, I have cultivated, so that they are now full, or quite large.

The study of Phrenology as a science, to which I was advised, has done more to harmonize the organs and to improve my mind than all my previous studies. My knowledge of mental science is of untold service to me in my ministerial work. Phrenology is most certainly true, and its laws and principles applicable and successful in my case.

JOSEPH CLEMENTS.

PERSONAL EXPERIENCE.—Phrenology has made a fortune for me, and also it has made me to know how to do business successfully. About twenty years ago, when I was a boy, a phrenologist examined and informed me that I would be successful if I studied and practiced medicine. At that time I did not fancy the medical profession; but a few years afterward I commenced the study and eventually practiced medicine for eight years with excellent success, and then retired from the profession with ample means; I commenced without anything. The chart given informed me that I would be successful in merchandising, which I have been pursuing ever since. Phrenology has pointed out those pursuits for me, and I feel that if it had not been for this noble science, I would have been in some unsuccessful vocation now, as thousands of others are. No young man should enter upon any pursuit without consulting a good phrenologist. And further, the science opens the way for men to read, think, and reason for themselves, a process which always tends to the elevation of humanity and further the cause of Christianity. Let all give a helping hand in a noble science for the benefit of mankind.

DR. J. H. HENNING.

RED KEY, IND.

CAUSES OF POVERTY.—It is estimated that \$2,000,000 have been given for charity in this city the past winter. The effect of the winter's

charities as administered—and of course reference is only made to those rendered necessary by the peculiar exigencies of the winter—has been to engender idleness and deceit, the parents of crime. Whereas the poor could not get work, they now would rather not work. There are few persons who have had anything to do with giving them relief who have not had their sympathies *outraged and their trust abused*. They find the readiness with which human beings resign themselves to living by the sweat of other people's brows is only second to the facility with which Artemus Ward offered his wife's brother on the altar of his country.—*N. Y. World*.

The proprietors of the Home of Health have been feeding in their basement hall about 100 poor people a day for the past three months. To ascertain the cause of so many persons seeking aid, for several days they made inquiries of all who came as to their history and personal habits. These inquiries elicited the facts that 80 out of every 100 had used liquors and tobacco up to this time, or till the time the panic began. The other 20 had committed self-abuses till their health was so impaired they could not work. Not a man among them was found but had used liquor or tobacco, or had abused himself in some way. "The righteous shall not be forsaken, or his seed found begging bread."—*Crusader*.

[Comment is unnecessary. Reader, do you know any young man who drinks, smokes, chews, or who—practices other bad habits? Point him to the poor-house, the prison, to the gallows, or to any other hell. Let him see whither he is drifting. Oh, where are the preachers who dare to rebuke these crushing sins, that stink under their noses every day of their lives, and yet go to Jericho for subjects on which to preach!]

WISDOM.

MANY a clergyman has broken down through preaching fine-print sermons to coarse-print people.

FIVE of the sweetest words in the English language begin with H, which is only a breath: Heart, Hope, Home, Happiness, and Heaven.

BEHAVIOR is a mirror in which every one shows his own image. There is a politeness of the heart akin to love, from which springs the easiest politeness of outward behavior.

PLATO, having raised his hand to correct a servant when in anger, kept his arm fixed in that posture for a considerable time. To a friend, coming in and inquiring the reason of his singular conduct, he replied, "I am punishing a passionate man"—himself.

IF we look through all the heroic fortunes of mankind, we shall find an entanglement of something mean and trivial with whatever is of joy or sorrow. Life is made up of marble and mud.

HE who has struck his colors to the power of an evil habit, has surrendered himself to an enemy bound by no articles of faith, and from which he can expect only the vilest treatment.

ART thou mistress of a household, and desirest a good servant? then "Take two pounds of the very best self-control, a pound and a half of justice, a pound of consideration, and a pound of discipline. Let this be sweetened with charity, let it simmer well, and let it be taken in daily, or, in extreme cases, in hourly doses—and be kept always on hand. Then the domestic wheels will run quite smoothly."

CONSTANT success shows us but one side of the world; for it surrounds us with flatterers who will tell us only our merits, and silences our enemies, from whom alone we might learn our defects.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

A KANSAS editor attributes his failure to publishing a nonpareil paper in a long primer town.

THERE is only two men in this world who never make enny blunders, and they are yu and me, mi friend.

A CHIROPODIST announces on his business cards that he has "removed corns from several of the crowned heads of Europe."

"I SAY," said a rough fellow to a fop with conspicuous bow-legs—"I say, don't you have to have your pantaloons cut with a circular saw?"

A WAG one evening pulled down a turner's sign, and put it up over a lawyer's door; in the morning it read, "All sorts of turning and twisting done here."

"ARE there any fools in this town?" asked a stranger of a newsboy yesterday. "I don't know," replied the boy; "why, are you lonesome?"

"A GREENHORN sat a long time very attentively musing upon a cane-bottom chair. At length he said: "I wonder what fellow took the trouble to find all them ar holes and put straws around 'em?"

A LADY wrote with a diamond on a pane of glass:

"God did at first make man upright; but he—"

To which a gentleman added:

"Most surely has continued so; but she—"

SCENE in a graveyard. Wife—"Ah, husband, do you see this beautiful capping? How delicately cut is the pure white stone!" Yes, very pretty." Wife—"But, William, have you no taste for art? You don't enjoy these things as I do. Just notice this slender column of marble, with the touching question so beautifully carved, 'Do they miss me at home?'" "Yes, I see, and here is her name on the footstone, 'G. A. B.' Yes, I guess they miss her if that was her name." Silence for a moment.

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

THE PHYSIOLOGY OF MAN; Designed to Represent the Existing State of Physiological Science, as Applied to the Functions of the Human Body. By Austin Flint, Jr., M.D., Prof. of Physiology and Physiological Anatomy in the Bellevue Hospital Medical College, New York, etc. In Five Volumes. Vol. V. With a General Index to the Five Volumes. Octavo; pp. 517. Price, cloth, \$4.50; sheep, \$5. Complete in five volumes, cloth, \$22; sheep, \$27. New York: D. Appleton & Co.

This is the most elaborate and important contribution to physiology yet produced in America. The author has examined all known authorities, but follows no one, where he can not verify every position taken. It is, therefore, a thoroughly independent, as it is a thoroughly honest work. Among the contents of the present and concluding volume, we have: The Special Senses, including Touch, etc; Olfactory Nerves; Olfaction; Optic Nerves; Anatomy of the Eye; Refraction in the Eye; Movements of the Iris; Accommodation; Binocular Vision, etc.; Auditory Nerves; Topographical Anatomy of the Ear; Physics of Sound; Uses of Different Parts of the Auditory Apparatus; Gustation; Generation; Female Organs; The Ovum and Ovulation; Male Organs and Elements of Generation; Fecundation; Segmentation of the Vitellus and Formation of the Membranes and Placenta; Development of the Embryon; The Osseous, Muscular, Cutaneous, and Nervous Systems; Development of the Alimentary System, the Respiratory System, and the Face; Development of the Genito-Urinary and of the Circulatory System; Foetal Life; Development after Birth; Death.

HAND-BOOK OF POLITICS FOR 1874. By Hon. Edward McPherson, LL.D., Clerk of the U. S. House of Representatives. This standard and Authoritative Political Manual which contains, in its 246 8vo double column pages, an authentic and exhaustive record of all important political action, National and State, from July 15, 1872, to July 15, 1874. One vol. octavo; pp. 246. Price, \$2.50. Washington: Solomons & Chapman.

We have here complete lists of Senators and Representatives of the XLII. and XLIII. Congresses; the second Inaugural and fourth and fifth Annual Messages and Special Messages of President Grant; Proclamations and Orders issued since May 11, 1872; Full Text and History of the "Salary-Grab" and the Salary Repeal Acts, with the Yea and Nay votes on each, and the individual accounts of each Senator and Representative; Judicial Decisions and opinions from the U. S. Su-

preme Court; Constitutional Amendments made and proposed to the organic laws of the several States; Financial Propositions and Votes in the XLII., XLIII., and preceding Congresses; President Grant's "Memorandum" to Senator Jones, and his other utterances, official and personal, on financial affairs; the Transportation Question, Report of the Senate Committee with all Congressional discussion and action; State Action on Railroads, Laws and Judicial Decisions of Illinois and Wisconsin; Civil Rights Bill, Amendments, Proceedings, and Votes; Woman's Rights, Proposition and vote in the United States Senate, and action in various States; Geneva and San Juan Awards, with the Acts of Congress for their distribution; New State Platforms of 1874, all which have been adopted up to July 15; Statistical Tables: A. Public Debt of the United States; B. Pacific Railway Bonds; C. Internal Revenue Table; D. Distribution of the Currency; E. Appropriations for the fiscal years 1872, 1873, 1874, 1875; F. Revenues and Expenditures of the Government; G. Presidential Vote of 1872 and State Elections of '72, '73, and '74. Here is a complete record of the doings of Congress during the period specified, and the work is without bias or partisanship. Statesmen and legislators will find it indispensable.

BIBLIOGRAPHY OF THE UNITED STATES Relating to Military Collective Biography. By R. S. Guernsey. Read before the New York Genealogical and Biographical Society on the 11th March, 1874. Published by the Society, 84 Madison Avenue, New York City.

In this comprehensive pamphlet the author shows what has been done for the memory of the officers of the army and navy in the way of published records and registers of their commissions and their services since the adoption of the U. S. Constitution in 1789, and also what has been done in literature for the memory of the services of the privates, as well as the officers, who served in the late civil war, and shows a neglect of similar publications relating to the rank and file of those who served in the Revolutionary War. He suggests and earnestly urges that records should be made and published by each of the States of the officers and men which such State furnished in the war for our national independence, and be presented as an appropriate offering for the coming Centennial celebration of that event. The pamphlet will be useful to all interested in the military biography and history of the United States.

PASSING THOUGHTS: Musical and Others. By Jabez Burns. 12mo; pp. 20; pamphlet. Price, 10 cents. New York: Jabez Burns, 107 Warren Street.

"Dedicated to all such as have bestowed labor, and taken pains to qualify themselves to sing the praises of God in the congregation of the saints acceptably." A collection of several popular and stirring musical compositions, with appropriate words.

DISCUSSION OF THE DOCTRINE OF HUMAN DEPRAVITY, in New Albany, Ind., Presbytery. An Overture to Modify the Statement, "Utterly Opposite to all Good, and Wholly Inclined to all Evil." Reasons why the Overture should have been Adopted, and why it was not. By Rev. Professor S. H. Thompson, LL.D. Pamphlet; pp. 20. Price, 25 cents. *Courier Steam Printing Establishment, Madison, Ind.*

When we attain to a correct reading and interpretation of the books of nature and of God, there will be more harmony among religious and scientific men. Now, we have different commentators, who, being differently organized and differently educated, come to very different conclusions, though starting from the same point and aiming for the same end. The learned author makes good points, and, sooner or later, his views must be accepted by the church. We shall refer again to this subject.

PROVIDENCES. With some Answers to Prayer, as Witnessed by several Eminent Ministers and Christians. To which is added some Extracts from the New Testament. Being an attempt to prove that the God our Bible recommends is the True One. Arranged in order by James R. Keefover. Pamphlet, 12mo; pp. 35. Price, 25 cents. Wilton Junction, Iowa.

Here are "evidences" of answers to prayer. First, we have facts quoted from the New Testament; next, from the history of Methodism; from the experience of the Rev. W. M. Lourie; from Geo. Fox's journal; from "The World Displayed;" from Bushnell's "Nature and the Supernatural;" and from John Wesley's journal. Many instances are given of the special interposition of Providence through human appeal. Believe them or not, here are the facts. We commend this pamphlet to the attention of the Positivists, the Spiritualists, the scientists, and all who are fond of cracking theological nuts.

SEVENTH ANNUAL REPORT of the Secretary of the Connecticut Board of Agriculture, 1873-74. Printed by order of the Legislature. Octavo; pp. 384; cloth. Hartford.

Professor Gold, Secretary of the Connecticut Board of Agriculture, has presented an admirable record of the year's proceedings in this beautifully published Report, which is published by order of the State Legislature. We think if a compilation could be made giving the gist of the topics discussed, for general circulation, it would prove of general value to every farmer in the Union.

ANNUAL REPORT of the Board of Regents of the Smithsonian Institution, showing the Operations, Expenditures, and Condition of the Institution for the Year 1872. One vol., octavo; pp. 456; muslin.

To all interested in science, of which the Smithsonian is representative, this Report will be welcome. Some very interesting papers are embraced in the volume, which exemplify the most recent investigations in their subjective fields. Such, for instance, as "Organic Bases," "The Nitrogen Bodies of Modern Chemistry," "Principles of

Crystallography and Crystallophysics," "Meteorology in Russia," "Ancient Aboriginal Trade in North America," "The Cave Dwellers," etc., contain much that is fresh and instructive.

GENTLE WOMAN AROUSED. A Story of the Temperance Movement in the West. By Rev. E. P. Roe, author of "What Can She Do?" "Barriers Burned Away," etc. Reprinted from the *Hearth and Home*. 12mo pamphlet; pp. 23. Price, 25 c. New York: National Temperance Association.

Mr. Roe utters no uncertain sound in this most sensible story. He is clearly on the side of the Lord, and speaks with holy unction.

THE PHILOSOPHY OF SPIRITUALISM, and the Pathology and Treatment of Mediomania. Two Lectures by Frederic R. Marvin, M.D., Professor of Psychological Medicine and Medical Jurisprudence in the New York Free Medical College for Women. Read before the New York Liberal Club, March, 1874. One vol., 12mo; pp. 68; embossed paper. Price, \$1. New York: A. K. Butts.

Are all Spiritualists crazy? Hear what the author says in his preface:

It is a sad thing that men and women can be found who deserve to be spoken of as these lectures speak of them; but we can not be blind to the fact that there are thousands of them in the world; they themselves speak of them as comprising millions. It is not to hold them up to needless ridicule that these lectures are written, nor is it in any way to wound or offend them. Bitter as they are, they are written in pity and love—pity for them, and love for the race. Their bitterness is because of their truth. These lectures are not written for spiritual media. Spiritual media are beyond the reach of lectures like these. They are in need of treatment which can be but faintly indicated in these pages. These lectures are written to save those who are about to be drawn into the meshes of Spiritualism, and to them, without further word of preface, the author recommends his lectures.

ROUTES OF TRAVEL IN COLORADO. A Hand-Book of Information for the Tourist, Invalid, Capitalist, and Immigrant. Table of Distances by Rail, Coach, and Public Roads; Expenses of Travel; Horse and Carriage Hire; Hotel and Boarding-House Rates; Sketches of Towns, Villages, and Cities, and Points of Interest to Travelers; Full and Complete List of Post-Offices, Express Offices, County Officers; Table of Altitudes; General Information Respecting Colorado, etc. 18mo; pp. 82; pamphlet. Price, 20 cents. Denver, Colorado: Wm. N. Byers, Publisher.

Here is "much in little." Would the reader learn all about the present condition of this young Rocky Mountain State? He may find it here, and all for the moderate price of 20 cents. Mr. Byers, the publisher, is editor of the *Rocky Mountain News*, and is one of the pioneer settlers of Colorado. He knows all about it, and knows how to tell it.

A HISTORY OF OUR FIRST HUNDRED YEARS, written by Mr. C. Edwards Lester, and published by the U. S. Publishing Co., New York, is now regularly appearing in numbers. It promises to be such a work as every American will be delighted to possess. Send for a prospectus.

THE CLOCK STRUCK THREE: Being a Review of "The Clock Struck One," and Reply to it. Part II. Showing the Harmony between Christianity, Science, and Spiritualism. By Rev. Samuel Watson. 12mo; pp. 352; muslin. Price, \$2. Chicago: S. S. Jones, Publisher.

Mr. Watson finds Spiritualism in the Bible, and he quotes Moses and the prophets to sustain his claims. He quotes John Wesley, Dr. Adam Clark, Lord Brougham, Robert Dale Owen, and many others. He reviews the opponents of Spiritualism, and discusses the general question, always in a Christian spirit, and from no other motive than to bring out the truth. Those who claim infallibility for human utterances must accept these teachings. They are also in keeping with the Old and the New Testament teachings, and must be considered the emanations, not of an abnormal mind, but of sane sincerity.

THE NATIONAL TEMPERANCE SOCIETY has issued the following tracts: "Constitutionality and Duty of Prohibition," "Alcohol in the Kitchen," "Malt Liquors—Their Nature and Effects," "Liquor Adulterations," "The Bible About the Bottle," "Is it Right to License?" "A Young Man's History in Brief," "What are You Doing?" "The First Glass," "The Bridal Wine-Cup," "Indictment of King Alcohol," "Thirteen Reasons for Total Abstinence," and others.

Send a dollar and order a lot for gratuitous distribution.

THE WINDOW AND FLOWER GARDENER. \$1 a year. Vol. I., No 1, August, 1874. New Brighton, Pa.: Calvin & Elverson, Publishers.

This new claimant for patronage is published monthly, and contains much valuable information. One department is edited by that charming writer, Daisy Eyebright. Send her your questions about housekeeping, or gardening, or floriculture, and she will reply through the *Window and Flower Gardener*.

THE NORMAL DEBATER; Designed for the Use of all Common Schools, Academies, and Colleges, as well as a Guide for Teachers' Institutes and Business Meetings in General. By O. P. Kinsey, Professor of English Literature, in Charge Forensic Exercises National Normal School, Lebanon, Ohio. One vol., 12mo; pp. 88; muslin. Price, 75 cents. Cincinnati: Geo. E. Stevens & Co.

A practical guide in all matters indicated by the title. It gives directions for the Organization of a Meeting; Officers and their Duties; Duties and Rights of Members; Management of a Motion; Privileged Questions; The Work of Committees; Order of Business; The Nature of Discussion and Manner of Proceeding in Debate; and Hints to Teachers and Pupils.

THE MODEL LANDLORD. By Mrs. M. A. Holt, author of "John Bentley's Mistake," and "Work and Reward." One vol., 18mo; pp. 201; embossed muslin. Price, 60 cents. New York: National Temperance Society.

A capital book for boys, pointing out the temptations of life, and showing how to escape "man-traps."

FOODS. By Edward Smith, M.D., LL.D., F.R.S., Fellow of the Royal College of Physicians of London, Inspector and Assistant Medical Officer for Poor Law Purposes of the Local Board, Late Assistant Physician to the Hospital for Consumption, Brompton, Corresponding Member of the Academic Des Sciences, Montpellier, and the Natural History Society of Montreal, etc. One vol., 12mo; pp. 485; beveled muslin. Price, \$1.75. New York: D. Appleton & Co.

The book is nicely published, and will prove every way acceptable to those of the regular, or allopathic school of medicine, who regard alcohol as food. To others, or to those of the hygienic school, who regard alcohol as a poison, and not food, the work will be regarded as "learned nonsense." The author shows much industry and research in collecting together a mass of matter concerning foods.

TRIAL AND CONVICTION of William E. Sturtevant for the Murder of Simeon Sturtevant, in Halifax, Mass., on Sunday Feb. 15th, 1874.

The young man found guilty is twenty-four years of age, and is of low degree. It will appear that avarice was the impelling motive to the crime, and that the criminal is as unfit for liberty as he is to die.

AN INTRODUCTION to the Study of General Biology. Designed for the Use of Schools and Science Classes. By Thomas C. MacGinley, Principal Croach National School, County Donegal. With 124 Illustrations. One vol. 12mo; pp. 200; muslin. Price, 75 cents. New York: G. P. Putnam's Sons.

Biology is simply another name for physiology, or the laws of life. The young Irish author has worked out an interesting little treatise, which will prove acceptable to many. If it contains nothing new, it is nevertheless an admirable compilation for general use.

THE OVERLAND MONTHLY, Devoted to the Development of the Country. Octavo; pp. 100. Price, \$4 a year. San Francisco: John H. Carmany & Co.

Besides the best wheat, the biggest trees, the most gold and silver, Californians produce one of the best magazines and some of the best newspapers. The "*Overland*" is the unique title given to the magazine of the Golden State. Though younger, this child of the Pacific is even stronger than many of its cousins of the Atlantic. Read the *Overland*, and learn to love glorious California.

REMINISCENCES. By David Parsons Holton, M.D. Read before the New York Genealogical and Biographical Society, 27th May, 1874. A very interesting discourse, and worthy a much better setting out.

THE MASCULINE CROSS and Ancient Sex Worship. By Sha Rocce. One vol., 12mo; pp. 65; embossed muslin. Price, \$1. New York: A. K. Butts.

A singular work, based on mythological researches, showing the origin of the cross, now called the cross of Christ. Scholars and investigators will be interested in the work.

EVIDENCES OF THE ANTIQUITY OF MAN. By James Herman Whitmore. Pamphlet, 8vo; pp. 26.

An interesting summary of the data furnished by archæological and philological researches with regard to the antiquity of the human race. Mr. Whitmore has grouped within a brief space a variety of information bearing on the subject and in the true spirit of the candid truth-seeker is willing to accept the conclusions which facts lead to. He believes, however, that in this matter, as in all others, "Science is the handmaid of religion, her friend and not her foe."

MR. HENRY T. WILLIAMS, of 46 Beekman Street, New York, publishes the *Horticulturist*, a capital magazine for rural homes. Farmers, gardeners, fruit-growers, foresters, and others should have it. Only \$2 a year.

Mr. Williams also publishes—

THE LADIES' FLORAL CABINET, and Pictorial Home Companion, at \$1.25 a year, with chromo, and is just the thing for all who cultivate flowers. Also—

THE LITTLE GEM, and Young Folks Favorite, full of pretty pictures, entertaining stories, puzzles, fun, anecdotes, questions, little pieces, and helps to school studies, at only 50 cents a year. Each of these are published monthly.

Gentlemen should take the *Horticulturist*, ladies the *Floral Cabinet*, and children should be presented with the *Little Gem*. All these publications are conducted in a clean, cultivated taste, and in a high-toned, Christian—not sectarian—spirit.

THE GOLDEN AGE, a weekly journal "of opinions," established by Mr. Theodore Tilton, has become the property of its late associate editor, Mr. William T. Clark, who is now both editor and publisher of the *Golden Age*. We note a change in form, which will, we think, be accepted as an improvement. Its price, \$3 a year, remains the same. A dime addressed to P. O. box 2,848, New York, will bring a sample number to such as may wish to examine the paper. In his felicitous Introductory Mr. Clark says: "It will be a paper of opinions, rather than of news, and will be specially devoted to the discussion of political, social, literary, and religious topics in a thoroughly independent spirit and way. It is not the organ of any party, sect, or clique, and can therefore afford to tell the truth and be honest. As its name indicates, it represents the to-morrow of the world rather than its yesterday, and criticises what is, in the light of what ought to be."

FIFTY-THIRD ANNUAL REPORT of the Board of Direction of the Mercantile Library Association of the city of New York, May, 1873–April, 1874. This institution grows with the growth of our city, and its usefulness is far-reaching. It now has 150,000 volumes, and 440 of the best periodicals published in the world. All young men in New York should become members.

THE STEVENS IRON-CLAD BATTERY. A complete illustrated description of this most destructive monster, with portrait of Edwin A. Stevens, the inventor. By Prof. R. H. Thurston, of Hoboken, New Jersey. Octavo pamphlet, with diagrams showing the ship and her machinery. A very interesting document, and useful to naval officers and to ship-builders.

OUR EXPRESSMAN, a monthly magazine devoted to the fraternity at large. Terms, \$1 a year. J. Henderson, 67 West Fourth Street, Cincinnati, Ohio. A live little magazine for a lively class of men. Who are more wide-awake than they who always put things through on the double quick? Send a dollar, and learn about the express business.

A CORRECTION.—Instead of 50 cents, the price of "Jesus, the Cure of Skepticism," noticed on page 212, September number, should have been \$1.

BESIDES the above, the following useful works are recently published.

WILEY'S AM. IRON TRADE MANUAL OF THE U. S., with a Description of the Iron Ore Regions, Blast Furnaces, Rolling Mills, Bessemer Steel Works, Crucible Steel Works, Car Wheel and Car Works, Locomotive Works, Steam-Engine and Machine Works, Iron Bridge Works, Iron Ship Yards, Pipe and Tube Works, and Stove Foundries of the Country, giving their Location and Capacity of Product. Compiled and edited by Thomas Dunlap. Quarto; pp. 760. Price, \$7.50.

TRI-NITRO-GLYCERIN, as applied in the Hoosac Tunnel, and to Submarine Blasting, Torpedoes, Quarrying, etc., being the result of six years' observation and practice during the manufacture of upward of five hundred thousand pounds of this explosive; Mica Blasting Powder, Dynamites; with an account of the various systems of Blasting by Electricity, Priming Compounds, Exploders, Electrical Machines, etc. By George M. Mowbray, Operative Chemist. With 13 Illustrations, Tables, and Appendix. Third Edition, rewritten. 8vo; pp. 124. Price, \$3.

3,000 PRACTICE WORDS, with an Appendix, Containing Rules for Spelling, Rules for Capitals, etc. By J. Willis Westlake, Prof. of English Literature in the State Normal School, Millersville, Pa. 16mo; pp. 80. Price, 50 cents.

RECOLLECTIONS OF A TOUR MADE IN SCOTLAND, A.D. 1803. By Dorothy Wordsworth. Edited by J. C. Shairp, LL.D. 12mo; pp. xlv., 316. Price, \$2.50.

THE ADIRONDACKS. Illustrated. By S. R. Stoddard, author of "Ticonderogo," "Lake George." Illustrated. 12mo; pp. 204. Price, \$1.

NIMROD OF THE SEA; or, the American Whaleman. By William M. Davis. Illustrated. 12mo; pp. 403. Price, \$2.

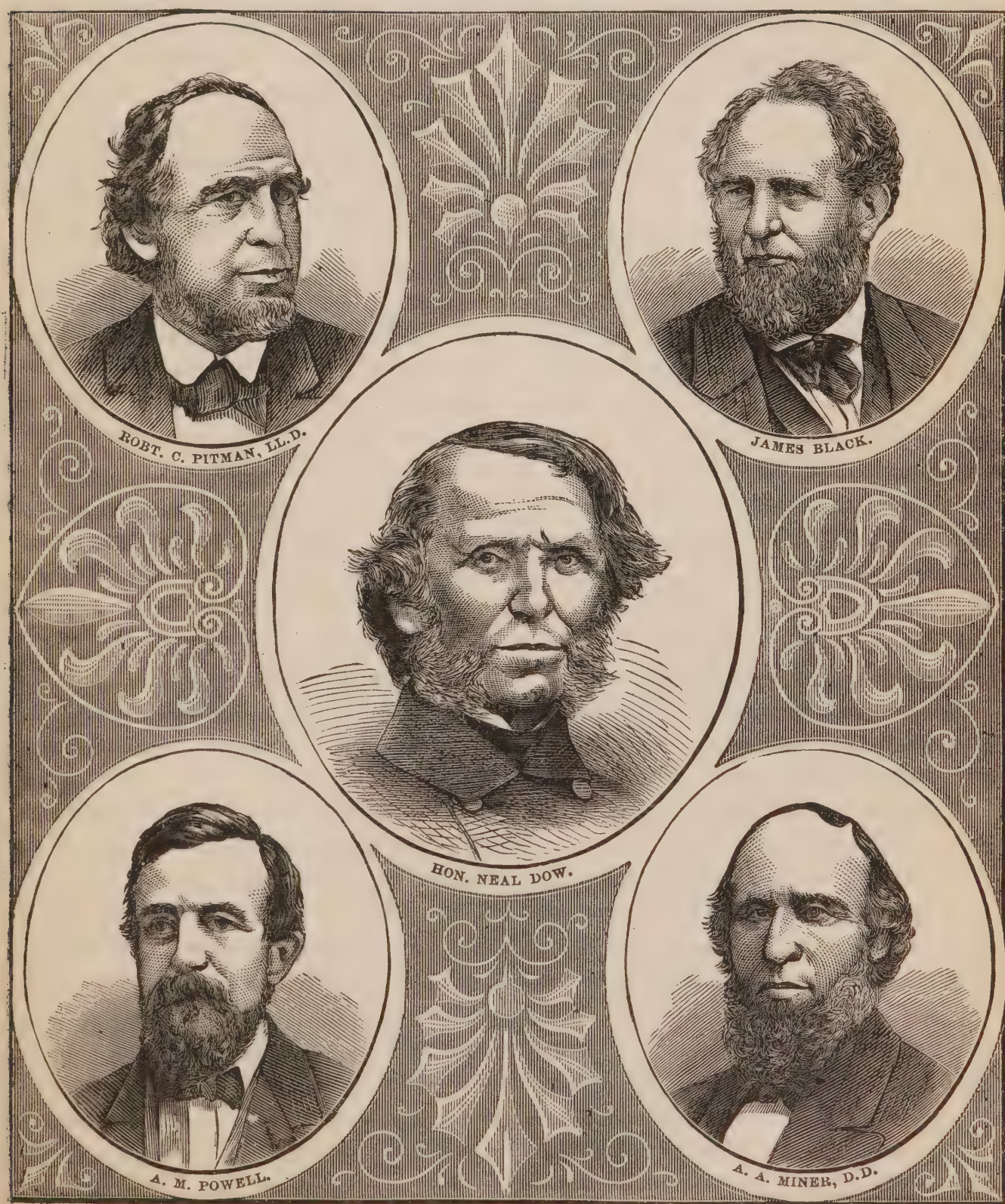
[All the above may be ordered, at prices annexed, from this office. They will be sent prepaid by return post.

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[WHOLE No. 431



REPRESENTATIVE TEMPERANCE ADVOCATES.

REPRESENTATIVE TEMPERANCE ADVOCATES.

WE present, herewith, a group of persons whom "drinking" men call fanatics, and whom order-loving, reformatory men call apostles. Our portraits are made either from photographs from life or from authentic drawings. In the center we place the honorable and the General NEAL DOW, the veteran author of the Maine Liquor Law; and what do we see in his face? His decision, clearness, steadfastness, perseverance, integrity, kindness, self-control, great will power, and practical common sense. He may not be poetical or brilliant in imagination, but he is a downright matter-of-fact, common-sense person. He is not afraid to take the lead in an unpopular movement where he thinks it right. Mrs. Grundy has no terrors for him. He does not stop to inquire "What will they say" before he buckles on the armor for a fight with popular customs, which lead down to dissipation, poverty, disease, pauperism, crime, death, and hell. Neal Dow is a character. Do you not see it in his head and face?

Mr. PITMAN combines several distinctive traits which should characterize him. He was cut out or organized for a leader, but his great modesty and natural diffidence disincline him to put *himself* forward. That is his fault. He is amiable, generous, just, respectful, devotional, energetic, methodical, practical. A good observer, reasoner, planner, and is capable of legislating, managing affairs—a good captain, and is, in all respects, a first-rate citizen. "He will do to tie to."

Mr. BLACK is a piece of solid humanity. He has a large body and a large brain. He is a well-proportioned structure, more useful than ornamental, seeking the good of all men by a life in harmony with the laws of life. There is no moonshine here; no pretension or make-believe. He weighs or considers every thought, and comes to correct conclusions. He is a wise counselor, a capable legislator and statesman, a warm friend, a just judge, and a good citizen. It would be perfectly safe to trust

this gentleman with the management of the affairs of the state or of the nation.

Mr. POWELL is a sound, thoughtful, prudent, judicious, liberty-loving spirit. He is an original thinker, a good talker—not so flowery as profound; not belligerent, but valiant. He neither courts danger nor shrinks from it. He has *moral* courage, and will die the death of a martyr, if need be, but will not compromise where principle is at stake. He is eminently kindly, charitable, conscientious, hopeful, trusting, and exceedingly liberal in his religion. He thinks for himself, and desires that others should think for themselves. Mr. Powell should become a legislator and statesman.

The Rev. Dr. MINER possesses a clear-cut countenance of the Wendell Phillips type, and evidently belongs to the clerical order. See how high the head in the center, at Veneration. If he follows his natural bent, how could he help becoming a praying preacher? He seeks the salvation of men from sin. He lives as near to God as circumstances permit. In and of a wicked world, he points the way onward and upward. He is lenient to the unfortunate, consigns no man to the abyss of the damned, but shows how to escape perdition and gain heaven. It is no great struggle for him to keep on the track and to live a consistent life, though temptations assail. He should become a Cicero in oratory, and an Oberlin in theology.

As a group, we regard the characters, one and all, as strongly marked, each having a distinct identity of his own; neither would be taken for the other. All are leading temperance men. Contrast them with any five persons with opposite views and principles—would they be of a higher or of a lower type?

All of these gentlemen have had something to do with state or national politics, or both, and the question naturally occurs, Whom shall we appoint or elect to legislate for our country's good? Shall we "go for" temperance men? or, shall we choose men who drink?

We are in favor of filling every office of trust, every office of honor, and every public place with temperance men. We would elect no man to any office who was not a pledged temperance man. Yea, and this in the interest of our people, our nation, and our race. Let us weed out the guzzling swabs who pervert and poison all they touch, and place upright, clean, intelligent, moral, religious, and temperate men in every public position. Then we might look confidently for progress, prosperity, and peace.

GEN. DOW.

NEAL DOW, or, as he is commonly called, Gen. Dow, was born in Portland, Maine, March 20th, 1804. His parents, like those of Mr. Powell in this group, were members of the Society of Friends, his father living to the great age of ninety-three. Under the prudent training of a Christian home young Neal spent a well-ordered childhood, and after leaving school embraced his father's business, that of a tanner. In the course of time he became the proprietor of one of the largest tanneries in the State, and still remains a resident of Portland and a promoter of his old business.

From a child he was an advocate of the principle of total abstinence, and when efforts were made in Maine to bring about "prohibitory" legislation, he energetically espoused the cause of the temperance men, and took such a part in the politics of Portland and of the State as he deemed conducive to the end sought. His efforts on the side of reform brought him into prominence. In 1851 he was elected Mayor of Portland—a triumph of the temperance party—and the same year he re-introduced a bill which had been lost the year before in the State legislature for the prohibition of the sale of intoxicating liquors as a beverage, and it was passed by a strong majority.

In 1855 he again served as Mayor of Portland, when he found it necessary to suppress many gross outrages of law and order committed by the liquor-drinking party, who, in their rage, endeavored to make him a victim of their brutal malevolence. His course at this time won general admiration for its prudence, firmness, and forbearance.

During the late civil war Gen. Dow served as a colonel of volunteers, and subsequently was promoted to the rank of brigadier-general. He was severely wounded in the unsuccessful

attack on Fort Hudson in Louisiana, and while lying in a house to which he had been taken was taken prisoner by the Confederates. After experiencing many hardships he was exchanged and returned to his home. In the interest of temperance Gen. Dow has made two or three trips to England, where he is highly esteemed by all classes of the English people. His many published addresses on his chosen subject would make several volumes, and a narrative of his experiences in the course of his reformatory career would interest all by their variety. In appearance Gen. Dow is a man of vigorous frame, of medium stature, with a clear and lively complexion, and an expression of steadfast but pleasing earnestness. In address he is direct and explicit, yet felicitous in illustration.

R. C. PITMAN, LL.D.

ROBERT C. PITMAN, whose career in connection with the work of reform among men is noble, and whose efforts have not been without success in redeeming many from a course of vice and degradation, is a native of Rhode Island, having been born at Newport, now the most famous of American summer resorts, on the 16th of March, 1825. He was, however, but a few weeks old when his parents removed to New Bedford, Mass., where they established a permanent home, and there Mr. Pitman still resides. Being of an earnest, inquiring disposition, he studied and read according to his opportunities, and at length completed his curriculum of youthful study at the Wesleyan University, in 1845. Making the law his profession, he entered the office of the late Thomas D. Eliot, M. C., and after a few years was admitted to the bar of Massachusetts in 1848. Subsequently he became a partner with Mr. Eliot, and entered upon a successful practice. His abilities brought him into political prominence, so that he was, at the comparatively early age of thirty-three, elected a member of the State legislature, serving as a Representative in 1858, and subsequently in 1864, and again in 1865, 1868, and 1869 occupying a seat as a Senator. In 1869 he was made President of the Senate.

In recognition of his ability as a jurist Mr. Pitman was appointed a judge of the Superior Court of Massachusetts in 1869, a position which he now holds, and whose functions he discharges with energy and efficiency. His devotion to the cause of human amelioration is manifest in the fact of his long connection with the temperance movement and his efforts

as a legislator and jurist to secure such political action as would promote the objects which temperance men, as lovers of order, sobriety, and social happiness have ever in view. At the convention which was held at Saratoga in August of last year, and to which reference has already been made, Judge Pitman presided and won universal approval among the delegates for his solid views on the important questions there discussed, and of his sterling capacity as a parliamentarian.

His degree, LL.D., was conferred on him by Wesleyan University in 1869.

JAMES BLACK.

JAMES BLACK was born in Lewisburg, Union County, Penn., in the month of September, 1823, and is now just fifty-one years of age. In 1836 his parents removed from Lewisburg to Lancaster, in the same State, and there Mr. Black completed his "schooling," engaged in the practice of law, and has resided until the present hour. As a youth he was a staunch friend of temperance reform, having identified himself with the movement as early as 1840, when he asserted the earnestness of his convictions by taking the pledge of total abstinence.

He has been a practitioner of law since 1846, and early won reputation for integrity and ability. In political affairs his record is almost entirely related to the temperance movement. It was his pen which drafted the call for the National Convention at Chicago, in September, 1869, at which time the advocates of sobriety and abstinence from alcoholic beverages organized the National Prohibition Party, and prepared to contest in the arena of politics for the cause of truth and humanity. On the opening of that convention Mr. Black was elected its President. His prominence as a temperance man, and his ability in other respects obtained the votes of the adherents of Prohibition at the Convention held by them in Columbus, Ohio, February, 1872, for the purpose of nominating candidates to represent their interests in the Presidential campaign of that year. Mr. Black was nominated unanimously for the Presidency, and John Russell, of Michigan, for the office of Vice-President. Although unsuccessful at the polls in the following autumn, the result was encouraging as a manifest of their strength, and of what they might accomplish in the future with a perfected organization.

Mr. Black is a good speaker, earnest, manly, and outspoken, and highly esteemed by all who know him, irrespective of class or party.

A. M. POWELL.

AARON M. POWELL was born March 26, 1832, in the town of Clinton, Dutchess County, N. Y. He is of Quaker stock, and remained on the paternal farm during boyhood, with the district school for his educational opportunity. Subsequently he attended for one year the State Normal School at Albany, with a view to teaching, and so to secure the means for a college course. As a boy he was much interested in Quakerism, in the temperance reform, and in the then active anti-slavery agitation. He left the State Normal School soon after the passage of the "Fugitive Slave Law," to become a lecturing agent of the American Anti-Slavery Society, and was an anti-slavery lecturer and a correspondent of the *National Anti-Slavery Standard*, the chief organ of the Abolition Party, most of the time from 1851 to 1862. In 1865 he became editor of that paper, and continued to have charge of it, and subsequently of the *National Standard*, which succeeded it, until 1873, when the latter was combined with the *National Temperance Advocate*. In 1871 Mr. Powell made a trip across the continent to the Pacific coast, with the special purpose of studying as a journalist the results of the Indian civilization experiment, inaugurated by President Grant.

In 1872 he visited Europe to attend the International Prison Congress which was held in London that year, and also to inquire, in Great Britain and on the Continent, into the causes of crime, especially the relations of intemperance to crime.

The 1st of December, 1872, he became associate editor of the *National Temperance Advocate*, and District Secretary of the National Temperance Society, with especial reference to the introduction of the temperance question into the sphere of Congressional legislation. This relation he still holds to the National Temperance Society and its organ, the *National Temperance Advocate*. He succeeded at the last session of Congress in obtaining the passage by the Senate of a bill providing for a National Commission of Inquiry for the thorough examination of the whole subject of the alcoholic liquor traffic, its relation to pauperism, crime, the public health, and the general welfare of the people; also the actual results of the license, restrictive, and prohibitory legislation in the various States of the Union. This measure, very generally welcomed by the friends of temperance in all parts of the country, as one of great national importance, is still pending upon the calendar of the House of

Representatives, having been favorably reported by the Judiciary Committee of that body, with a strong probability of its passage at the ensuing session of Congress. At the National Temperance Convention held at Saratoga in 1873, Mr. Powell was chosen a member of the committee with the other gentlemen of the present group, to secure a standard Temperance Prize Essay, the terms of which have been widely set forth by advertisement and circular.

Mr. Powell has lately accepted the editorship of a new, first-class weekly paper, the *Northampton Journal*, at Northampton, Mass., but he will continue his relations with the National Temperance Society, and its work in the sphere of national temperance legislation.

A. A. MINER, D.D.

ALONZO AMES MINER was born in the town of Lempster, Sullivan Co., N. H., August 17th, 1814. He was the second child and only son in a family of five children. Of Puritan descent, a grandson of Charles Miner, a revolutionary soldier, and a descendant, in the sixth generation, of Thomas Miner, who landed at Boston in 1630, and removed to Connecticut with the younger Winthrop about 1646.

Through all his early years he was an invalid, not expecting to see thirty years of age. Reared, however, on a farm, and in the midst of a family of sisters, surrounded by most favorable influences, health and strength came with his growing years. Having the advantages of the village schools, he was later a pupil at different times in the academies at Hopkinton, Lebanon, and Franklin, in N. H., and Cavendish in Vt. He began school-teaching at the age of sixteen, and for several terms alternated this with his academic instruction.

In 1835 he was engaged to assist in establishing a new school in Unity, N. H., and assumed the entire charge of what became known as the "Scientific and Military Academy" of that place, which had a prosperous career for many years. For a little more than four years Mr. Miner had charge of this school, which became a center of influence in the community.

During these years of active labor as a teacher, Mr. Miner had by no means relinquished an original purpose, to make the ministry his profession. At the request of friends he preached one or two discourses in February, 1838, and commenced regular ministrations in May of the same year. For the ensuing year and a half he performed the

double duties of teacher and preacher, devoting half his Sabbaths to the congregation at Unity, and the remainder to neighboring towns, visiting a circuit of more than twenty and receiving solicitations from many more. After six months of this laborious life he resigned his place in the school, but was persuaded by his patrons to continue for another year.

In June, 1839, during a session of the N. H. Convention of Universalists, held at Nashua, he was ordained, and shortly after accepted a call to the pastorate of the Universalist church in Methuen, Mass., and entered upon his new duties in November.

In July, 1842, he received a call to Lowell, Mass., to take charge of the second society of that city. There, as at Methuen, he was a member of the town school committee, and was also actively engaged in the temperance cause, then assuming its first political importance. In addition, he also engaged with the Rev. T. B. Thayer in editing the *Star of Bethlehem*, published for some years at Lowell, and afterward merged in the *Freeman*.

Early in the year 1848 Mr. Miner received a call from the second society of Boston, to become the colleague of Rev. Hosea Ballou, in place of Rev. E. H. Chapin, then called to New York. He entered upon the duties of this new office on the first of May of that year, and has remained from that time until the present, a period of twenty-three years.

For several years after his removal to Boston he was elected, as he had been in other places, a member of the public school board; and in this capacity he was instrumental in the beginning of the reform that has gradually abolished the medal system from the Boston schools. For several years he was a member of the Board of Overseers of Harvard College, while his connection with Tuft's dates from near its beginning. It was doubtless in view of this service in the cause of education, as well as his eminent abilities, that gave him, from Tuft's, in 1861, the degree of Master of Arts, and from Harvard, in 1863, that of Doctor of Divinity. In connection with the former college he performed important official relations, being in 1855 chosen a member of the board of trustees, and made their secretary in 1857. During a short time he also served as treasurer. After the death of President Ballou, the college was for some time without a president, but at length unanimously elected Dr. Miner to the vacant chair. At that time the college was financially weak, being from fif-

teen to eighteen thousand dollars in debt. Dr. Miner undertook its improvement, encouraged and sustained by many friends, and for the first three years gave his services to the college. Its financial gain during the eight years of his presidency may be seen from its last reports, which represent its assets as nearly a million of dollars.

His attitude on the temperance question is too patent in Massachusetts, if not through the whole country, to need more than passing mention. His later prominence in connection with this reform has been through force of circumstances, not from any change of policy on his part. He began to plead the cause of total abstinence at the age of sixteen, in his native town. We have spoken of his activity in the cause during his pastorates at Methuen and Lowell. He continued the same good work in Boston, both in public and private, and it was only when the question was carried prominently into legislation that he, with many other friends of temperance, was carried with it.

His important connection, in 1867, with the enforcement in Boston of the prohibitory statute of 1855, and the masterly manner in which he aided the Temperance Alliance in its conflict with the liquor-dealers and eminent politicians, are well known, especially at what cost of personal enmity all this was done. Not to mention such slight matters as the defacing of his house by tar, the music of smashing bottles

about it, and the hurling of stones through the windows, he was made the target of the bitterest personal and newspaper abuse; and malignity went so far that a prominent liquor-dealer was moved to warn him to be careful how he sat near the windows or ventured out alone at night, "for there were men in the city who would do anything for money, and there was money enough to hire them to do it." Those familiar with the Doctor's grave and courtly manner can understand the calmness of his reply: "The people you speak of will not harm me unless such men as you encourage them to do it."

Despite all this, the victory was won, and at Dr. Miner's home one sees a massive and elegantly illustrated copy of the Bible, the gift of the Alliance, in recognition of his distinguished services in its behalf.

Since as before, in whatever phase of the cause, the repeal of the law, the formation of a new party, he still labors for strict and uncompromising prohibition.

Concerning his connection with other reforms and philanthropic measures, much might be said. As a member of the American Peace Society, a pleader for the sanctity of the Sabbath as against the opening of libraries and places of resort, a protestant against the growing power of dogmatism in educational and secular interests, and in many kindred ways he places an unhesitating record on the side of purity, order, and enlightened Christian freedom.

CULTIVATING AND RESTRAINING FACULTIES.

SOME of the most important inventions the world has been blessed with have originated in the minds of those not connected professionally with the department or trade to which the invention refers. A school teacher named Eli Whitney saw a stalwart negro patiently at work picking seeds from the cotton fiber, and learning that the worker could do only about three pounds a day, he carefully thought over the matter and invented the cotton-gin, adding hundreds of millions, in the two-thirds of a century now passed, to the wealth of the world. In like manner, persons who read phrenological books will have started in their minds valuable suggestions, some of which are frequently sent to us for explanation; and it is interesting to see what wisdom and sagacity, and what out-reach of thought are thus awak-

ened by non-professionals in Phrenology. We have before us this question: "When Combativeness is small, and Destructiveness is large, how can we cultivate Combativeness without also cultivating Destructiveness? and how can we restrain Destructiveness, then, without restraining also Combativeness?"

In reply we would say that although the faculties can be used singly, they work more naturally in groups and pairs. There is one finger on the human hand, called the index finger, that will permit the other fingers to be clenched hard while that remains straight. The middle finger and the little finger can be held out straight, but not while the other fingers are tightly closed. A single faculty can be exercised while the others are measurably quiescent, but there are pairs of organs which seem to work more naturally together.

The organ of Individuality more naturally works with the other perceptives than with Cautiousness or Combativeness, yet Individuality is the organ through which a knowledge of outward things comes to the mind; and it is only when Individuality perceives something that is dangerous to the person that Cautiousness is aroused. Individuality may be employed in reference to subjects which relate to each of the faculties and propensities; but, as we have said, the more immediate the relation, the more ready co-operative action will be found to exist in the whole group of perceptives. Approbateness and Self-Esteem are very nearly allied in location and in influence, yet they are different in character. Combativeness and Destructiveness correlate readily and naturally; so do Cautiousness and Secretiveness, Constructiveness and Ideality, Causality and Comparison, Order and Calculation; but either one of these groups or pairs of faculties may be dormant while the other is vigorous, thus showing that they will work separately, and that they are distinct in their nature, as tasting and smelling are distinct, which also co-ordinate in operation. If we smell something we are accustomed to eat or drink, it excites the taste to desire it, though there are many things we have smelled that we have never tasted, and there are some things we have never tasted nor desired to taste, and which excite disgust; that is, gustatory repulsion is excited by the sense of smell.

We have known boys with large Destructiveness and moderate Combativeness that could not be insulted enough to fight until the fight were thrust upon them, and then they would fight very much as the boa-constrictor does, or the bull-dog, quietly crush their foe if possible; and the instant the foe retired they would not follow him any more than the trip-hammer does the iron when removed from the anvil beneath. Combativeness is often quite satisfied with mere talk, with barking and threatening, while Destructiveness, which lies at the foundation of severity and executive force, is not noisy, but executive and severe, and, when perverted in human nature, produces cruelty. The tiger, lion, and other carnivora that live on the flesh of animals, doubtless enjoy the process of killing the game. Game dogs, terriers, for

instance, seem to enjoy any opportunity to crunch rats, and even after the poor rat is dead, the terrier will go and re-crunch him from end to end, so as to break and re-break every bone in its body.

It is very likely that either Combativeness or Destructiveness is excited by the exercise of the other; and it is unfortunate for the individual who is large in one of these and small in the other; but this occurs from inheriting large and small organs from the two parents.

One can exercise Destructiveness legitimately by cultivating thoroughness, and efficiency, and force in the channels of business, where there is no anger or vengefulness. We can think of different kinds of business that would excite the organ of Destructiveness which would not provoke the individual to anger, and, therefore, not excite Combativeness particularly. If one desires to train these two faculties, it will aid him to consider their nature, and what will excite one that will not excite the other. If we may make such an illustration without offense, we may say that Combativeness is required to seize a pig and jerk him down and hold him, while Destructiveness is required to apply the knife. Many a man could do the former who would quail in doing the latter, and he is obliged to look away to refrain from seeing the severe deed done. Many a person can hold the head or hands of a child to have a tooth extracted, or the ears pierced, who would shut the eyes to prevent seeing the painful process, the one exhibiting Combativeness, and the other exercising Destructiveness. Parents who use the rod upon their children illustrate the action of these two dispositions. One who is large in Combativeness will berate the child, and, if the offense is one that is particularly irritating, will punish in the heat of passion by a box on the ear, the old-fashioned way of imparting moral training, or by a blow of the stick or whip, or sometimes by throwing something at the one who has offended. But one who has less Combativeness and more Destructiveness will take time to consider the case, and give the culprit time also, and five minutes or five hours after the offense will deliberately, but without apparent anger, inflict severe punishment, slowly giving blow after blow, allowing them time to strike in and take effect, and yet be

calm, unangry, cool, and apparently self-possessed, kind, and patient. If the whip must be applied, let it come after the child has had time to get over the excitement or anger that produced the offense, and then these deliberate blows, which are not really very heavy, will produce favorable results, if whipping may be said ever to produce such results. When a parent gets angry, and his Combativeness boils over, he may do violence to the one who has offended him, without producing any salutary result; but when the whipping seems to be judicious, or when it is instituted by Combativeness and Destructiveness, backed up by Conscientiousness and

Benevolence, it will do good. Half of the horses that are whipped in anger are only made angry and cowardly; but the man who never whips his horse in the harness, but once in a while takes him out of the harness midway between home and market and gives him a thorough overhauling, and lays away the whip, has only to speak for the next month to be obeyed; but one who is whipping and teasing all the while, never has a free, honest, servant in a horse; and the man who is always scolding, and frequently whipping, never has obedient children except from fear of a blow; and when out of reach of such a parent, the child feels safe, and acts without much regard to parental authority.

TRUE BEAUTY.

THE lily drops its pearly leaves,
And fades the beauty of the rose;
But virtue fairer colors weaves,
As fadeless as the drifting snows.
No frosts affection's smile can blight,
Or take one love-look from the face;
And hope can give the eye a light
The storms of time can not efface.

Give me a face that shows a soul
As pure as morning's rosy light;
Its beauty fades not, nor grows old,
But shall remain forever bright.
All other forms of beauty fade;
The rose of health shall die away;
But beauties by the mind displayed
Shall live through all eternity. A. S. M.

KNOWLEDGE BY TRANSMISSION AND INDUCTION.

THE RELATIONS OF LIFE, SPIRITUAL AND MATERIAL.

SINCE man was created, all important truths in the realm of nature have come down to us cumbered with theories. The revolution of the earth, the ebb and flow of tides, the existence and operations of electricity, and the philosophy of light and heat, are a few of the many subjects, to which various theories have been applied, all calculated to establish the truth in relation to the philosophy of these difficult and important questions. Mesmerism and psychology have claimed the attention of a few kindred minds, and portions of the world are willing to concede that there is a mysterious power by which one individual can direct the thoughts and movements of another; but no theory has yet been presented which will satisfactorily account for these wonderful results, or which will harmonize man's mental and physical existence with his mysterious surroundings. Man thinks; man receives knowledge and claims to reason. But how and why he thinks, how and from what source his knowledge comes, and what men-

tal operations take place in the process of reasoning are subjects which the world denominates abstruse, and while willing to wonder at results, makes but feeble effort to trace their causes. But, standing as we now do, in the glowing light of science, and surrounded by the many known laws which govern matter, may we not be allowed to theorize on some of the operations and manifestations of the spiritual part of man, and seek to establish some basic principle by which the source, acquisition, and diffusion of knowledge may be so understood as in some degree to account for the marked difference in the moral and intellectual status of man, and also to furnish some light on what is termed supernatural knowledge, or psychological presentiments and impressions?

As human reason acts a very conspicuous part in the investigation of all difficult subjects, a few thoughts in regard to the mental process of reasoning may not be amiss. Reason has to do only with what already exists; hence reasoning is but a system of compari-

son, the doubtful or unknown with the known or credible. When a new idea or conception is presented to the mind, reason claims an introduction, and at once commences to canvass all the known truths, ideas, and principles within the scope of individual knowledge to find one which bears a likeness in part to the new idea presented; and if such analogy is found among the known treasures of the mind, faith and belief are at once informed, and the new conception is garnered into the individual repository of knowledge to aid in establishing other truths. But in case no such likeness or harmonic is found, the new idea should find no favor. Nevertheless, the new conception may have been one of the most important ever revealed to man, and rejected only because its harmonic likeness, through ignorance, could not be found in the treasury of the mind. A declaration of belief is one thing, but the finding of the harmonic likeness, which is the true standard of valid faith, is quite another thing. This system of arriving at conclusions is the only true measure of individual knowledge and belief. By it St. Paul reasoned upon the questioned subject of the resurrection of the dead; finding the harmonic likeness in the germination of the grain. By it Franklin solved the mystery of electricity, and identified the lightning shock and his artificially-produced spark. By it Morse reasoned from the known to the unknown, until now the whole earth flashes with intelligence. And by it it is proposed to investigate the three important ideas: the origin, acquisition, and diffusion of original knowledge.

ORIGIN OF KNOWLEDGE.

Upon the first proposition, the origin of all knowledge, there need be little if any difference of opinion, for all "nations, kindreds, and tongues" concede the source in God, the self-existing, non-created, ever-operative power and intelligence who creates all, knows all, and governs all.

Cause and effect form the never-ending chain in the operations of nature, each effect becoming a cause to another effect—the passive and active alternating in all the operations of the innumerable laws which control all things. When we grant that God is the first cause of all things, and hence the author

of all knowledge, we must also grant that we have found the first link in the beginning of the chain of cause and effect, for no ulterior cause exists. Hence the Alpha, the Infinite, the Supreme, whom we call God, and to whom we ascribe all power to create and sustain, and all wisdom and knowledge to direct and control. Reasoning from the foregoing postulate, the human brain is only the reflector, and not the originator of knowledge. Then the position is clearly established that human beings have not the power to originate an idea, principle, truth, or fact, but all must emanate from a higher source, the fountain of all knowledge. The fact that this earth revolves on its axis did not originate with Galileo. He merely developed a truth already existing. The line, the circle, the angle, the square, in all their multiform relations and combinations, forming the interesting science of geometry and trigonometry, all had their origin, not in man, but in the supreme Architect. Man inducts and imparts knowledge, as the moon borrows and reflects the light of the sun, having no original light of its own.

The second proposition, the diffusion of original knowledge from its original source, presents a subject upon which a theory can be based, which, if reasonably established, will give the key to a thousand wonders.

Knowledge is an entity, a real existence, the essence or spirit of an original fact, truth, or principle. Knowledge is diffusive and infusive through its natural element or medium. The assertion that there is a medium of knowledge or thought, is an hypothesis; but it is a matter of necessity, as much so as was the assumption of the astronomer, who, reasoning from cause to effect, discovered a mathematical ratio of distance between the known planets, from the sun outward; but finding his rule broken in one intermediate space, declared that a planet must occupy that space. Hence his telescope was adjusted, and soon not one but four planets were discovered, proving his theory correct. So this medium of thought or knowledge (the two appear synonymous) is of absolute necessity, in order that the gems of truth from the infinite realm should impress and enlighten the sentient beings of earth.

God being omniscient, and possessed of all

knowledge, and knowledge or thought having a medium in which it is held, and through which it acts, and this medium being boundless as God himself is boundless, we have presented to us the singular phenomenon of mankind living and moving in this medium of thought, and constantly encompassed by all knowledge. As we live and move in the elements of air, light, heat, electricity, so, also, do we live and move in an element or medium through which knowledge is transmitted, as sound is transmitted through the medium of air.

THE TRANSMISSION OF KNOWLEDGE.

We have now presented the source of all knowledge as being in God, and the means of its diffusion, as by and through its natural element or medium which is coextensive with God; and it now remains to be shown in what manner, and under what circumstance or condition, original knowledge can be received or obtained by human beings. The solving of this proposition unfolds the link or connection between the finite and the infinite, between the mutable and the immutable. All forms of earth bearing the earthy nature are changeable. All things in the infinite realm are immutable. And the blending of these two natures is the harmony of the universe. The earthy nature consists of all the material forms in the various kingdoms of earth. The heavenly nature, or God's realm, consists of spirits or imponderable essences, as the immortal part of man, the infinite knowledge, the infinite power, and the infinite life, animal and vegetable. These two natures are distinct, but affiliative. The one may be denominated the art, and the other the science in the handiwork of God. Art is but the use or application of science to accomplish a certain result; and the perfect or imperfect result depends upon the correct or incorrect application of science. Art is changeable and perishing; science is Heaven-born and immutable. In the earthy realm results are conditional, in the infinite realm results are absolute. But the idea most important in this connection is, that the material organisms of the forms of earth, in the animal and vegetable kingdom, have neither life, power, nor knowledge in and of themselves; but that these higher essences of infinite birth are imparted to them, through a

system of infusion, induction, or inspiration. And here is where heaven and earth in harmony blend. But the blending is conditional, which is the cause of the endless diversity in the life, power, and knowledge of the living creatures of earth. And when we speak of the condition prerequisite to infusion or induction, we touch the key-note in the grand anthem of the universe, for unison and harmony (twin sisters of song) must attend the wedding.

UNISON AND HARMONY,

we affirm, are the prerequisites to the blending of the infinite attributes of God with the material organisms of earth, from which come the life, the power, and the knowledge of man. The claim that the blending of the infinite with the finite, from which results ensue, is conditional, and that the condition is a state of harmony between the two natures, may seem entirely hypothetical, but a limited survey of the operations of nature will soon disclose the harmonic likeness, from which reason grants credence.

When in perfect unison two musical strings will respond, the untouched to the touched, while a number of feet apart; but if they are in the least degree out of unison, no response will be had. Why does the response depend upon the unison? In this we see a condition, in order that effect shall follow a cause, and that condition is unison. Trifling as this simple illustration may appear, the knowledge of the truth involved may lead to important results. Mesmerism, with its wonderful revelations, is the result of harmony and unison. All who understand the operations of mesmerism concede that the subject is more or less under the mental control of the operator, so that what the operator thinks, the subject will think and speak. This fact alone develops two of the most important ideas connected with the theory under examination. First, that an agreement or harmony must exist between the operator and subject before the thoughts of the one can be transmitted to the other. And this, harmony between the two is brought about by the operation of mesmeric power. And, second, in order that the thoughts of the operator can be transmitted to the subject, there must be a medium of thought, like the wire in telegraphing, and the air in trans-

mitting sound. These two ideas, unison and harmony, and medium of thought, form the two main pillars in the theory we aim to present.

Thus far no allusion has been made to the natural organs of sense, through which a knowledge of facts and ideas are conveyed to our apprehensions. The five senses are of the earth earthy. They are the indispensable avenues of knowledge between man and man, but not between God and man. Man can not commune with God nor receive impressions or influence from him through any of these five earthy channels. All the high and noble aspirations of man, all the divine influences and impressions which he has received, and all the knowledge which the world of mankind possesses, all, originally, were transmitted through the inscrutable, imponderable element which is here styled the medium of thought or knowledge. And not only does God inspire through this medium, but human thoughts enter into it, which can and will be inducted into other minds when the conditions and harmony before mentioned properly exist. A sound may exist and no ear to hear it, or the ear may be so imperfect as not to receive it; so a thought may exist in this medium, and a defective organism of the brain may never allow the mind to be impressed with it; while another, having the conditions of the brain in harmony, will induct the thought and profit thereby. In this way innumerable impressions are constantly being made upon the mind of man through the countless variety of mental organism, each inducting according to the capacity, susceptibility, and condition of the brain, from the smallest idea to the loftiest conception.

A more concise enunciation of the theory is this: God is the author of all knowledge; knowledge is an entity, a real existence, and exists in, and is transmitted through its natural medium, which is as boundless as the universe. Life and power are alike attributes, having the same author, and are held in, and transmitted through, their kindred media; and all are immutable. The human body, and its various functions, are earthy, material, and mutable; but so fashioned by the inscrutable wisdom of God as to induct these three divine attributes in

their regular order: 1st, Life; 2d, Power; 3d, Knowledge. The induction of these attributes is conditional, and that condition is unison and harmony, which must exist between the subjects of the two realms before the infinite will blend with the finite. The three distinct material organisms in the human structure, through which the three cardinal attributes of Divinity operate, are multifarious and various in each and every individual, no two alike, and made so by the hand of the great Architect, "who doeth all things well."

ORIGIN OF LIFE.

The egg, the nerve, and the brain are the three distinct points or links which connect the infinite with the finite. The greatest scientists declare that all life, both animal and vegetable, originates in, and springs from, the egg. This declaration is unquestionably true; and still there is the question yet to be determined, whether the life is in the material organism of the egg, and forms a part of its material structure, in its incipency, or whether the material organism of the egg is lifeless, and inducts life when conditions are favorable and the harmony exists, which is prerequisite to the blending of the infinite life with the finite organism? The latter view I adopt because it harmonizes with the universal and immutable law of transmission. That is, that no manifestations of life, power, or knowledge can be had without the blending of the two natures by transmission and induction. The egg is the mysterious point through which life is inducted, which animates all earthly beings, and which perishes as soon as its mission is performed. The nerve is the conductor or inductor of power, and its capacity is increased by its natural growth, and surcharged at the will of the creature. The brain is the material organ in the highest scale of infinite perfection, which inducts knowledge and emits it through the mental process of human thought. These three sublime points link the infinite with the finite, and stamp the impress of Deity upon all sublunary things.

We must not overlook the natural disposition which marks the career of every living being. The wolf and the lamb are two homogeneous quadrupeds, differing physically only as their propensities would naturally require.

To capture and devour mark the prominent propensity of the wolf, and the necessary prerequisites are sharp claws, sharp teeth, great strength and endurance. In these four particulars the wolf differs physically from the lamb. The question then arises, do these four points of difference cause the ferocity of the wolf, or is its propensity natural and inborn, and do these physical points develop in consonance with that ferocious propensity? That the propensity is inborn accords with our theory of transmission and induction. Propensities are of high origin, and we denominate them good or bad in accordance with our personal interest and education; they form a part of the great economy of nature and are transmissible by induction into the material organism of man, beast, and every living form. The lion, the wolf, the hawk, neither make themselves nor their propensities. God fashions the organs of each, susceptible of inducing the ferocious propensity or disposition, and they go forth to rend and devour; while the deer, the lamb, the dove, through their appointed organisms induct the mild, the innocent, the gentle disposition, and, having no weapons of defense, become the marked prey of the former.

Man is not only a composite of all the material substances of the kingdoms of earth, but is susceptible of inducing in degree all the attributes in the infinite realm, including the propensities manifested in the brute creation. Hence we see animal propensities cropping out in the acts and conduct of members of the human family, causing one to murder, another to steal, a third to cheat and deceive, and so on through the whole catalogue of crime. But as the lion can be tamed in degree, and his ferocious disposition molded and bent, yet not radically changed, so the lion in man can be held in check by culture and influence.

APPLICATION.

The applications of this theory must be few and brief. By it the difference in the mental capacity and consequent knowledge of individuals is as easily accounted for as it would be to prove that electricity will pass from a positive to a negative pole, or that water under the same head and discharge will give greater motion and power with one

wheel than with another. The idiot has life and power, but no brain organism susceptible of inducing knowledge from the great fountain, nor even of receiving it secondarily through the natural senses; while Newton with his finely-wrought brain organism drank in largely from the original fountain of knowledge and was greatly in advance of his cotemporaries. A mental prodigy is an individual, usually a youth, whose peculiar organism of the brain inducts a superabundance of knowledge of one particular kind, from the original fount; he drinks directly from the ever-living fountain of God. The precocious Vermont boy, and the recently-reported English lad, whose mathematical powers infinitely surpassed the most profound students of the age, are examples of this kind; and here and there are developed other scientific prodigies in other directions, all accounted for by, and perfectly harmonious with, the theory here enunciated.

In the moral and religious order Christ is the marked example. Having the most delicately-wrought and finely-developed brain, he inducted infinite knowledge direct from the supreme source of all knowledge, and clearly saw and read upon the trestle board of God the purest rules of moral government, and the future destiny of the human race. And it is worthy of note in this connection that Christ, in all his sayings, had little or no reference to the arts and sciences, but was entirely engrossed in his one moral and eternal mission. We may here affirm that even Christ was born, lived, and received knowledge and power from the same source, through the same medium, and in the same manner as all mankind receive knowledge and power, differing only in his susceptibility of inducing knowledge and power infinitely above the ordinary capacity of man. But, says one, you rob Christ of his divinity. By no means, I only give it, in degree, to the whole human family; for when and where the infinite blends with the finite, divinity is found. A *perfect* rule needs no exception.

THE PSYCHOLOGICAL.

Dreams, presentiments, and visions must claim a moment's thought. Sleep is the mysterious, natural suspension of the functions of sense and physical activity, while the brain may be still in a condition to receive

knowledge. How consistent, then, that induction should operate, impressions be made, and knowledge of facts before unknown be mirrored on the tablet of memory, to be called up in waking hours. The physical activities suspended, the world shut out, and silence supreme, how fitting the condition and how perfect the harmony for the higher and Divine influences to record lofty truths upon the tablet of the mind! The more feeble and dormant the physical, the more active and impressive the spiritual organs. All prophecy is but the utterance of impressions made under the rule of condition; and this day and age is not without its prophets.

There is a high moral excellence embraced in this theory, which, when fully understood, and properly practiced, will abolish torture, ameliorate punishment, and establish the *true* Christian standard of human action in regard to erring humanity. If propensities are subjects of transmission and induction, depending upon the peculiar organism of their material functions for their natural manifestations (which this theory claims), it then follows that the whole catalogue of evil propensities, and their concomitant actions, are subjects more of pity than of blame. Human society, by the aid of human law, is striving to mold and train these diversified natural propensities into a uniform system of action according to a particular standard of conventional usage. This, indeed, is a very worthy

object, and highly commendable. But should there not be some connection, or affinity, or concord, between the means employed and the end to be attained? Propensities are plastic and actions controllable; but do not the means commonly used to modify and soften the propensities and reform the actions tend rather to increase, than lessen, the evil complained of? The whole procedure in our criminal courts is based upon the erroneous assumption that men are alike by nature, but differ in action, by means of the will, which it is thought each individual can and should control. Hence the arbitrary arrest, the public trial, the heartless sentence, the unwholesome cell, the galling chains and wretched fare. These are the strange appliances of society used to soften and modify the disposition, correct and reform the actions, and restore the unfortunate to sobriety and society. When natural infirmity and deformity are recognized in intellect and disposition, as in body and limb, then will commiseration and kindness hover about the offending, guilty brother. Then will that beautiful expression, "Judge not," and the still nobler one, "Father, forgive them," be more fully appreciated, and its spirit pervade our treatment of the criminal. And then will faith, hope, and charity take up their abode upon the earth, and strew the pathway of life with heaven's choicest blessings.

J. H. GOULD.

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

THE WORLD'S MONEY—SPECIE BASIS BANKING.

THE bullionist claims that coin is the money of the world, and hence that paper currency must rest upon a specie basis—that is, must be convertible into coin. There are people who believe him.

Now, it so happens that there is no money of the world. Efforts have been made to establish unitary money, unitary weights, measures, language, etc., but we have not ripened up to the institution of these unities yet; and so each nation or political division of the

world has its own money. In trading, borrowing, and lending they exchange commodities with each other, gold being usually the last thing called for; and then not as coin, but as a commodity by weight—as bullion, at its market price. Coin, with rare exception, has only local currency, and is restricted to mere retail business.

It further happens that there never has been a paper currency convertible into coin, except certificates of specie deposit—if these may be

called currency. The attempt to maintain coin payment of currency has always failed; and the pretence of such payment has been a false pretence, made to favor class interests at the expense of the public.

In our legislation respecting bank issues, we have assumed that a nominally convertible currency is sound—that is, is really convertible, when the issue does not exceed the ratio of four dollars currency to one dollar coin; and, in spite of recurrent disaster growing from this false assumption, proven false repeatedly, in our own experience and that of every other people who have attempted to maintain coin payment of a currency which was inflated beyond the coin basis, by the repeated suspension of coin payment, we still have a party among us determined to enforce a return to such currency. Why? Does not somebody expect to win?

A distinguished senator, who is bullionist authority, says: "All paper money must rest, to some extent, upon confidence." Let us try this sound currency, this confidence money, by a commercial standard.

A cabal of conspirators subscribe capital to establish a warehouse under some common title, as *The Excelsior*, or some other. The managers purchase and put in store say one thousand bales of cotton and other merchandise. They receive the goods of others on storage, they buy and sell.

Upon the cotton they issue warehouse receipts for various parcels, as one bale, two bales, five, ten, twenty, fifty, and one hundred bales respectively, to an aggregate extent of four thousand bales. With these receipts as evidence of property, they sell and receive the equivalent of four thousand bales for one thousand bales in store.

Cotton being an object of speculative demand, these receipts may pass from hand to hand as evidence of property in store through a hundred or more successive sales before actual delivery shall be demanded. Occasionally a receipt may be presented and prompt delivery be made, but this does not disturb the even current of business; all goes on well so long as "confidence" remains unimpaired. In due time delivery for consumption and export reduces the stock so that the *Excelsior*, with all its resources, can not respond to the extent of its liability. For, unfortunately for these sellers short, the other houses in the trade have been equally enterprising in uttering four-fold receipts, so that upon general demand for delivery, it turns out that the whole stock in mar-

ket is but twenty-five per cent. of the quantity represented as subject to delivery in the volume of receipts. Of course a cotton panic follows. The houses can deliver but one unit of cotton, honestly represented in one equivalent receipt only, and fraudulently misrepresented in three others. So, when called upon to liquidate cotton obligations, the trade "suspends" cotton delivery. The inflated trade on the "confidence" basis suddenly ends.

If it be said that these traders may have other resources sufficient to discharge their obligations, so that, although they fulfill only a quarter part of their cotton engagements, yet if they can give an equivalent in something else, they are not really insolvent; the reply is that such alternate liquidation does not atone for the fraud, nor does it prevent the confusion and distress arising from the sudden arrest of three-fourths of the business movement, in this case, any more than does the like operation on the part of the banks when they suspend specie payment.

On the specie basis pretence, for each dollar of coin in bank or treasury we tolerate the issue of four equally original titles to it, three of which are necessarily fraudulent; and this is the "sound paper currency"—the convertible paper money of history.

The difference between the two cases is, that the swindle of the cotton operators is secret, while in the case of sovereign nations and authorized bankers it is open; everybody knows it, and consents to it by legal sanctions.

The hypercritical may find another exception to the exactness of the parallel in the differing fates of the two classes of operators. The private conspirators do not command entire social regard. Sometimes they retire upon their well-invested levies, sometimes, also, the less prudent of them are dealt with by the courts, and accommodated with country residence and modest fare and apparel at the cost of the State. The magnates of the profession, however, manage better; they secure in advance, by public enactments, the power to levy toll upon all products and all exchange, and are esteemed as able financiers and statesmen.

Contrary to obvious truth, against the wisdom taught by adverse experience, we assume that coin is the sufficient equivalent of exchange. In contradiction of this assumption, and in violation of moral sense, we issue four times as much currency, payable in coin, as there is coin to pay with. With this false assumption and this deliberate fraud at the foundation of our financial system, we attempt to

conduct the business of a nation which lives by production and trade. If the coin and "confidence money" were together sufficient for exchanges, have we a right to expect security in the conduct of business with such money—money inflated three hundred per cent.?

Of a system of money so founded, failure may be predicted; reference to history establishes the fact; for under it general bankruptcy by some occult law has recurred with singular regularity at the end of every ten years, with sporadic cases running through each decade.

Perhaps ten years measures the average life of a business generation. Each new set of men, growing up under like usage and maxims, run a like round of experiences; expend their resources in the hope of winning, with the odds of ninety-five in the hundred against them, and at the end of that time all but five per cent. sink into the abyss of bankruptcy.

The general suspension of specie payment by the banks and the general failure of business men in 1827, 1837, 1847, 1857, is familiar history. The effects of the crisis of 1827 are nearly forgotten now. The almost universal bankruptcy of 1837 hurt the country immeasurably. Many a man still thinks of that time with a shudder. The revulsion came when

the State banks, stimulated by government deposits, undertook to fulfill the offices previously performed by the Bank of the United States from which the public funds were removed by Gen. Jackson; and in the midst of large speculative adventures in land, which widened the derangement of business, greatly increased the volume of obligations and intensified the general distress. Men were not only ruined, but were bewildered as well. They saw no future escape from the slough of despond they were wallowing in. Business revived very slowly, and did not fully recover the ordinary measure of activity before the fated tenth year arrived; and in the collapse of 1847 many strong houses went down finally. Of the panic of 1857, the Bank Commissioner of the State of New York, in his report, made the following year, said: "The crash fell like a thunderbolt from a clear sky."

In all these instances the coin could not be had when most wanted; and the confidence, which really floated the currency, was suddenly destroyed; so that on this mixed basis of one-quarter coin three-quarters confidence money, men engaged in business have been playing a game of hazard against loaded dice. As usual, the bag-holders win.

CHARLES SEARS.

THE LIQUOR BUSINESS IN THE UNITED STATES.

A CORRESPONDENT of the New York *Evening Post* furnishes the following statement. He says that he has obtained the figures from official documents, and that he has presented them in the following compact form so that even the casual reader may see how large, both absolutely and relatively, the traffic in intoxicating liquors is in this country:

Statistics showing the amount of money spent in the United States for intoxicating liquors during the year 1870, as taken from official records:

Imported and domestic distilled and spirituous liquors.....	\$1,344,000,000
Brewed and fermented liquors.....	123,000,000
Imported wines.....	15,000,000
Domestic wines.....	5,000,000
Total.....	\$1,487,000,000

The amount spent for liquor in each State is also given, and it appears that New York, Pennsylvania, Ohio, and Illinois have the unenviable precedence; the investment in the three last named being more than double that in any other, and in New York more

than quadruple. The same writer makes a startling comparison deduced from the following figures. In the same year,

The cost of flour and meat was.....	\$530,000,000
The cost of cotton goods.....	115,000,000
The cost of boots and shoes.....	90,000,000
The cost of clothing.....	70,000,000
The cost of woolen goods.....	60,000,000
The cost of newspapers and job printing...	40,000,000
Total.....	\$905,000,000

So that for the above staple articles scarcely two-thirds as much was spent as for intoxicating liquor. We are not, therefore, surprised to learn that there were 140,000 liquor-saloons in the United States, each having (estimated) 40 daily customers, making 5,600,000 drinkers; and that there were 400,000 more persons engaged in the liquor business in the United States than in preaching the Gospel and school-teaching; and from the effects of intoxicating drinks 100,000 are annually sent to prisons, 150,000 to drunkards' graves, and 200,000 children are reduced to want. It is

estimated that the clergy of the United States costs annually \$12,000,000; the lawyers, criminals, prisons, etc., \$90,000,000; and intoxicating liquors, as before said, \$1,487,000,000.

[How long will intelligent men permit themselves to suffer from this unchained devil, who roams freely through the land causing disease, crime, desolation, and death in his course? Why do not the men and the women of the nation rise in their strength and put a stop to this nefarious business? There is a

worse condition than civil war, and that condition is human slavery. War exterminated human slavery in these United States—must we resort to arms to put down the tyrant, Alcohol? Preachers may preach, women may pray, but so long as physicians prescribe alcoholic liquors for nursing mothers, nursing babes, and for others, the traffic will continue. Must we down with the doctors? No; but we must down with poisonous drugs, including everything which has alcohol in it. Then we may hope to become a temperance nation.]

WILLIAM BAXTER, THE AMERICAN INVENTOR,

THIS gentleman has inherited largely from his mother in physique, temperament, and intellectual characteristics. He is quick in perception and intuitive in judgment. The wisest and best decisions he ever makes are quick, sharp, and intuitive. If he were in the field of purchasing, where he had to estimate an acre of timber in a lump, or had to buy cattle on the hoof for the slaughter, he would make estimates almost as accurately as the rule or the scales would make them.

He belongs to the realm of science and literature to a considerable extent, and if he had been trained in Harvard or Yale, he would have taken high rank.

He has the power of utterance and ability to state that which he knows very clearly, and among men of his experience and education, whatever that may be, he is more successful in his power of plainly stating ideas than other men. He reads character well; his first impression of a stranger is generally sound, and he knows whom to trust and how to govern men.

He has a good memory of that which he learns, and a fact does not have to be impressed upon him the second time. Hence, he always accumulates knowledge wherever he goes; gains something that he can use. He has mechanical judgment, and with train-

ing and practice would show skill, not only to plan wisely and adapt means to ends, but to reduce to practice whatever he had occasion to deal with.

He is a critic; sees everything about as it is. He has will-power and determination which make him headstrong and resolute, and contrary if opposed. We find here, also, Conscientiousness strong enough to make him severe on delinquents. He finds it exceedingly difficult to pass over and condone unjust transactions. He has a feeling that people ought to be honest, at least, if they are neither brave, polite, nor wise; and if a man is thoroughly honest, he always has use for him. He would never turn a man away from his employment if he thought him the soul of integrity; would find something for him to do.

He is cautious enough to be always on the alert for danger, but is frank, outspoken, and direct in speech. He values property only as a means to ends. His sense of value comes more from experience and judgment than from a miserly feeling. He thinks rather than feels that he requires a certain amount of money, and plans to acquire it simply because it is a matter of necessity.

His social nature is strong; he is naturally friendly, and wins friends wherever he goes. Men feel that he is friendly, and they become

attached to him and take his part. He has integrity and kindness, which make him honest toward all and kind toward the needy.

they are verified; yet he has strong prejudices and preferences in respect to men; rarely makes a mistake in estimating strangers; but



He has respect for greatness and reverence for the sacred. Hope is not extravagant. He is something of a critic, and inclined to be skeptical, not to accept statements until

he has a preconceived good opinion of human nature, and inclines to trust it. He generally gives poor human nature the benefit of the doubt, and is inclined to think people

who are accused are perhaps not so bad as they are made to seem; and he sometimes tells friends to wait till the trial comes on, and see what the defense is.

He is a sharp and strong thinker, but his mind takes a very practical direction. If he were scientific in his information, as he is in his natural instincts, he would be an eminent inventor, and especially an improver of machinery. He hardly would see a process anywhere that he would not see wherein it could be improved.

He is more stern and strong and thorough than severe; generally avoids a quarrel for himself or anybody else, and it is only when a quarrel is thrust upon him that he responds. He has a large brain and an abundance of vital power to sustain it, and he appears to be as healthy a man as we ever met. We judge he is from a long-lived, healthy, vigorous, and moral family, and that he has inherited no taint which makes him weak, either in mind, body, or estate.

WILLIAM BAXTER, whose strongly-marked portrait accompanies this sketch, is the son of a Scotch engineer, who emigrated to America in 1805, and settled in Morristown, New Jersey, where our subject was born, Nov. 22d, 1822. He inherited mechanical and inventive skill, and being put to work in his father's factory—a cotton mill—he early acquired a high degree of mechanical taste and skill. When a child he made several ingenious improvements in the machinery of his father, and as early as the age of twelve he was placed in a machine shop at Paterson, where he worked upon the first locomotive built in that city. He was employed to assist Prof. Morse in bringing out the magnetic telegraph and helping to put it into operation for sending the first message. Meanwhile, he was a hard student, becoming familiar with works on mechanical engineering and acquiring the French and Spanish languages; but in 1851 he was called to Mexico to erect an extensive cotton factory, and for ten years was engaged in that country in works of great magnitude.

When in Mexico he made an important improvement in the Turbine water-wheel, which attracted much attention throughout Europe and America. He was offered in Mexico decorations and titles, and the presidency of a college of arts and sciences on the plan of Cornell University.

Since his return to the United States, in 1867, Mr. Baxter has been constantly at work on one mechanical problem after another. On his journey home from Mexico he whittled out of a piece of pine a model of what is known as the "Baxter Adjustable S Wrench," which has become indispensable in factories and work-shops in every part of the world.

Having established himself in Newark, N. J., Mr. Baxter turned his attention to the invention of "a small, compact, portable, safe, and economical steam power," which could be introduced for all uses among the people. The celebrated Baxter Engine, brought out in 1868, is the result of this effort. Being manufactured on the interchangeable principle, the same as rifles and pistols, so that each part will fit any engine, and if a part breaks it can be sent from the factory to any remote place, renders this engine peculiar.

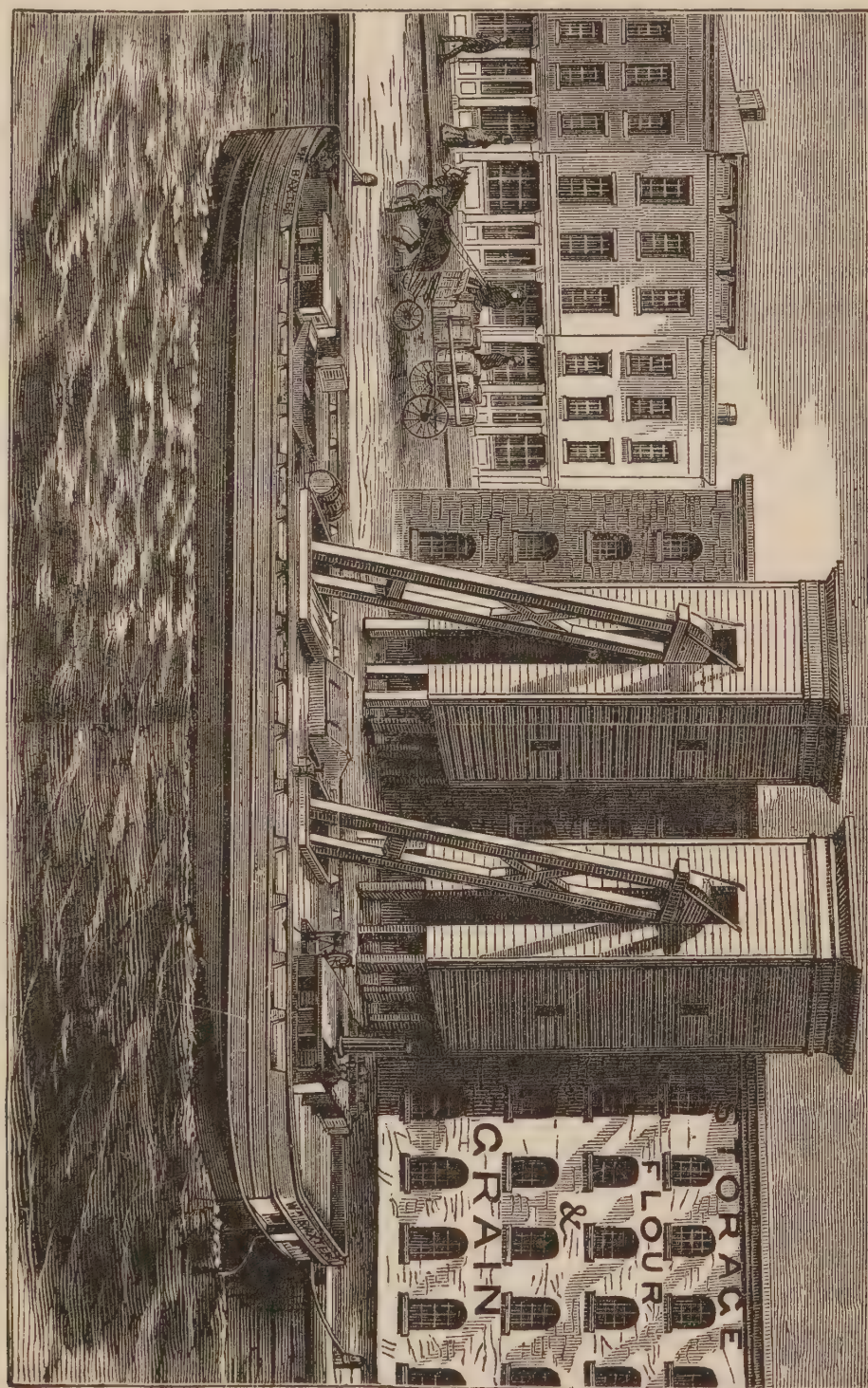
His next work was the invention of a steam-street car, which ought to, and we hope will, become universally used, dispensing with the use of horses for this service.

His last, and perhaps his greatest triumph, is the invention of a steam canal-boat, which has previously baffled all engineering talent which has been applied to it, and had come to be considered impossible. The Legislature of the State of New York having offered a reward of \$100,000 for the successful solution of the problem of propelling boats by steam on the canal in such a manner as to compete with horse-power in economy, great rivalry to attain this end and obtain the prize was awakened. Mr. Baxter was the successful man, having been awarded the first prize. The \$100,000 is to be forthcoming. There were peculiar difficulties about this matter. The law required that the boat should be only of a given length, width, and draft of water; that it should carry as much freight as the old horse boats, besides transporting its own machinery and fuel (certainly an unfair requirement), and that it should transport the freight as economically as could be

done by horses. "The official record of the trial trip gives credit to the Baxter boat for a speed of three and nine-tenths miles per hour upon a consumption of fourteen and eighty-two-one-hundredths pounds of coal per mile, carrying a load of more than 200 tons, in addition to the machinery and fuel,

the Erie Canal alone, and it is calculated that when the system shall have been generally introduced the yearly savings on all the canals of the country will not fall short of \$10,000,000. It will also double the capacity of all canals." That is to say, it is equivalent to the construction and free gift of just such

THE BAXTER STEAM CANAL BOAT



which may be condensed as follows: one ton of freight, sixty miles, at a cost of one cent for coal, or, in other words, it is carrying freight at twice the speed and half the cost of the horse boats. It was estimated by the commissioners of award that the result would effect a saving of \$4,000,000 per annum on

another canal as the Erie Canal, which new canal should be run without any cost to the country. Of course it will enhance the value of every acre of land in the West, and tend to reduce the cost of bread on the sea-board and increase the value of wheat to producers.

The great mechanics of the world, with

whom Mr. Baxter must be numbered, have done, and are doing, for mankind an incalculable service. It is common to laud the heroism and achievements of military genius, but we can name a dozen inventors, embracing Watt, Arkwright, Whitney, Fulton, Morse, Elias Howe, and Goodyear, the value of the efforts of each one of whom far outweighs the achievements of a thousand Cæsars, Alexanders, and Napoleons; indeed, it is questionable if the world would not have been better if these men had never been born. They were destructives, while the inventors are constructives, and we can not refrain from saying that the inventive genius of mechanics in respect to the implements of warfare, by making war destructive, has lessened its frequency and mitigated its horrors, so that invention in the direction of warfare, though used in a wrong cause generally, has ministered to peace by making war dreaded.

EDUCATION COMPULSORY IN CALIFORNIA.—The legislature of California passed an act, on

the 28th of March of this year, which is of the nature of a compulsory statute with regard to the education of youth. It provides that parents, guardians, etc., shall educate their children *somehow and somewhere*; makes the violation of the act a misdemeanor punishable by a fine of ten to fifty dollars; prescribes the process for carrying out the law; requires census marshals to make lists of all children liable to the provisions of the act; requires teachers to call the roll of such children in a certain way, to note absentees and report them to the proper board of education; provides for the deaf and dumb a State institution for their gratuitous instruction, and provides for a truant officer in cities of twenty thousand inhabitants, and for boards of inspectors for each city or town. Must the great "intelligent" East be forestalled in matters intellectual by "half civilized" Pacific States?

WHITE COAL.—Another wonder of nature has been lately unearthed, so "they say," in Australia, and they call it white coal. It consists of felted vegetable fibers, like peat, which contain, interspersed between them, fine grains of sand. This white coal covers large tracts, requires no mining, and is used in large quantities as fuel. It is easily combustible, and burns with a bright flame.

Department of Ethnology.

True Christianity will gain by every step which is made in the knowledge of man.—Spurzheim.

THE ANCIENT INHABITANTS OF WESTERN EUROPE BLACK.

THE researches of modern science in the ancient history of mankind have given rise to many theories, some strongly impregnated with probability, some the fruit of imaginative minds, yet not without a trace of logical presumption to give them a character above mere speculation. The use of the imagination as a valuable aid to scientific thought has been demonstrated over and over again, but it is only in connection with a basis of fact or of strong presumption that imagination renders good service. A late writer, who has been compiling certain data concerning the early inhabitants of Western Europe, has found evidence which he thinks is of sufficient weight to warrant him in strongly leaning, at least, toward the belief that they were a very dark or black-skinned people. As we, of America, are generally re-

lated to the races of Western Europe, particularly to the German and Celtic, the characteristics, physical and mental, of the nations who preceded them as occupants of the soil, and to some extent became incorporated with them, are interesting. The writer discusses the subject in the following manner:

"A look at the present population of South Wales, of the south of England, of the south and west of Ireland, and of the inland and northern districts of the Scottish Highlands, is sufficient to suggest the suspicion that a large proportion of the people are direct descendents of a black race. Scientific inquiry has indeed established the fact that France, Spain, and the British islands were inhabited by such a race before the arrival of the Kimmerians. There is a natural disinclination among the children of European

civilization to retrace their pedigree to ancestors whose countenance shared the color of the aborigines of Africa and the Pacific isles; but science is no slave of social prejudices, and is bound to proclaim that a large majority of the present inhabitants of Western Europe are the progeny of a race whose skin was black.

PHYSICAL INDICATIONS.

"Persons who have preserved a high degree of relationship with this black race have brown skins, large, lustrous, dark eyes, with long, dark eyelashes; round heads, strongly arched in the phrenological region of Veneration, Firmness, Self-Esteem, and Continuity; faces rather round; foreheads sometimes broad, but often low; strong and massive lower jaws; chins generally round; full lips, of which the upper lip is large and long; straight or concave noses, but frequently short, with broad nostrils; coal black, or very dark brown hair, which sometimes curls; not much hair on the body; a thin beard; rather thick legs, sometimes very much bent; legs and thighs usually short in proportion to the length of the body; an erect bearing, and various side motions in walking."

We meet many persons in America who possess many of these characteristics, but whether or not they are evidences of a descent from a black parentage is to us an unresolved question. Our *savant* goes on to say:

"In view of the prevalent notion that negroes can not turn white, it may be in place to recall some of the instances of such changes having really occurred. It must be borne in mind, however, that the variation which we wish to explain is the product of a constant mingling of races, extending over a period of at least two thousand years. There are instances of visible changes in the type of the negro effected when transported to another climate within much less than a century. Every American knows that in two or three generations the negroes lose in this country the extreme wooliness of the hair and the intense blackness of the skin, even where there is no mixture with the blood of a white race; and that where such a mingling of races occurs the changes produced in two or three generations are exceedingly great. The Italian physiologist, Caldani, states that a

negro cobbler came to Venice when a boy, and that his skin was at the age of manhood of a color no darker than that of a European suffering from jaundice. There are many such instances of a change of color taking place from mere change of climate. Lücken mentions a negro now living at Groningen, in Holland, who has at present a light-brown complexion, but who was deep black about twenty years ago. A surprising instance, perfectly authenticated (*Ausland*, 1847), is that of a negro woman who on being carried from Zanzibar to Cairo, in Egypt, turned completely white within two years. Dr. Hutchinson states in the "Transactions of the Ethnological Society" (1861) that a negro slave in Kentucky, a child of black parents and himself born black, had, at the age of thirteen, a white spot near the left eye, which spread over the whole face, and subsequently over the body, rendering him completely white after a lapse of ten years, and that the negro had then the appearance of a healthy European with a fair complexion."

But the features of a negro are specifically and widely different from those of a European, how, then, could the one last mentioned have the "appearance" of a European. In this country the changes wrought by three or four generations of intermarriage between negroes and whites, even where the advance is constant toward the white type, do not so thoroughly eradicate negro peculiarities of physiognomy as to make it difficult for the observer of average experience to detect them. There are, to be sure, exceptional instances, *lusi naturæ*, which appear to be inexplicable by any known laws, and those instanced by the writer (if they are to be credited) certainly belong to them. However, such strange manifestations *might be* outcroppings of an inherited strain according to the principle termed atavism.

CHANGES FROM WHITE TO DARK.

"Examples can also be adduced of white people turning dark, and even black. Pruner-Bey, a German physician and ethnologist, who has held for many years a high official position in Egypt, says, in his work "On the Diseases of the Orient," that he has observed that Europeans residing in Egypt turn dirty brown; in Abyssinia they change to a peculiar tinge somewhat like bronze; on the coast

of Arabia yellowish brown; in the desert of Arabia half brown; in the Syrian mountains reddish; and that the hair not only grows darker, but receives also a softer texture, and becomes thin and inclined to curl. Langsdorf narrates in his travels around the world that he met on the Marquesas islands a number of Europeans who had in a few years turned as dark as the natives. The great explorer of Africa, Barth, himself grew by degrees of a reddish brown, like the negroes on the Congo Mountains. Ritter, the greatest authority on geography, says that every one, no matter of what race, who resides a long time in the valley of Mecca acquires a sickly yellow complexion. The descendents of the Portuguese colonists in the tropics are described by Forster in his travels around the world as having grown, after a residence of a few centuries, almost completely black; and in Batavia, according to Gillan in his account of the inhabitants of Batavia, the people of European descent are even blacker than the natives themselves. It is apparent, therefore, that the change of color exhibited by the present population of Western Europe is no disproof of their being descendents of a black race. The burden of the proof rests entirely with the historical monuments that are brought forward to testify to the fact.

A GLANCE AT ANCIENT HISTORY.

"It is well known that the history of the migration of the Aryan races to Western Europe does not reach back further than a few centuries before our era. There are no positive data of the presence of Celtic and Germanic tribes in France, Germany, and the British islands much earlier than the time of Julius Cæsar. The history of the Greek and Roman nations can not be retraced for more than a thousand years before our era. Beyond the foundation of Rome, and beyond the Trojan war, lies, however, a history that is known for as many thousand years anterior to these events as have passed since then unto the present day. The history of the great contests of the Egyptian empire with mighty nations north of the Mediterranean Sea, a thousand years before the name of Rome or Greece was spoken, annihilates the long-standing theory of the pure Aryan descent of the population of Western Europe.

"An Egyptian fleet engaged in battle on

the Mediterranean Sea is pictured on the bas-relief of Medinet-Abu, which dates from the time of the fourth dynasty, or about 6,000 years ago, and 3,000 years before the days of the Greeks and Romans. At this remote period nations lived on the northern coast of the Mediterranean which could venture to engage in war with the powerful empire of Egypt.

"The Egyptian documents show that about seventeen centuries before our era the Egyptian kings appointed special functionaries to watch over the interests of Egypt on the Mediterranean. The races represented on the tomb of Rekhmara seem to have been highly civilized. Their style of wearing the hair is very similar to that of the Libyans, and the presents they make are objects which indicate a rather high degree of art in metallurgy and pottery. The northern nations are generally designated as Tamahu and Anebu; but a little later, in the fifteenth century before our era, appears a name similar to that of the Sardinians. The maritime power of the Mediterranean races seems to have been very great at this time, and the Egyptians tell of several conflicts they had with them. In the thirteenth century an extensive confederation of northern nations, among which the names of the Libyans, Sicilians, Achæians, Lycians, and Etruscans seem to be distinguishable, landed with a large number of vessels on the Egyptian shore and invaded the country. Their expedition was not successful. The inscriptions furnish a list of the objects that fell into the hands of the Egyptians, and the swords, daggers, cuirasses, silver cups, and numerous other things, prove that the enemy was far beyond the stages of barbarism. When the allied forces attempted another invasion they brought on their ships several thousands of horses and mules, and hundreds of chariots of war. It is remarkable that these European invaders made no use of the bow and arrow, but fought with swords about a yard long, double-edged, and broad, and occasionally with pikes and lances.

"The Egyptians were not always at war with the nations of the opposite shore. Many a monument depicts, also, scenes of intercourse with them, such as making and receiving presents, that were entirely of a peace-

ful nature. The people of the districts of modern Italy, France, and Spain, and of the islands of Corsica and Sardinia, generally preserved very amicable relations with the Egyptians, and their name does not appear in several of the lists of the confederated nations which attacked the empire of the Nile. It appears even that they regularly furnished a contingent to the Egyptian army, which was incorporated in it without the strange, distinctive uniform with which the Egyptians loved to clothe the foreign troops in their pay. The inscriptional paintings of the Egyptians reveal that these people of the North-west were a black race, somewhat darker than the Egyptians, but of a facial profile similar to theirs. The amicable relation generally existing between the populations of the Nile and of Western Europe receives, therefore, the natural explanation that they were people of a kindred race."

The investigations of Piazzzi Smith, Renan, and others with regard to the old Egyptians, do not accord with this writer. The first describes them of "a reddish brown complexion, with the nose long, and either straight or slightly aquiline, the lips rather full;" while the complexion of the women is "a yellowish pale olive." Smith, in his "Ancient History of the East," states that the old Egyptian had but few pigments, and used them evidently as conventional distinctions in the representation of *conquered* races. They rarely, if ever, depicted their conquerors in battle. It is also stated by the best authority on ancient Egyptian records, that in some cases the colors are probably those with which the people used to paint themselves. Herodotus alludes to this. It seems a little odd that the inhabitants of Western Europe should have been black, darker than the Egyptians of the times of Memphis, when the influence of transplantation from Africa to Europe has been to whiten the complexion, and *vice versa*, as witnessed by our writer's quotations. We read further on this really attractive subject:

PREJUDICE ADVERSE TO THE BELIEF.

"The strongest opposition to this unexpected revelation of the early history of Europe comes from persons whose education has inspired them with a prejudice against the blacks. No such objection can, however,

be raised against the supposition that the early inhabitants of Western Europe were a kindred race with the ancient Egyptians, as they were a highly-cultivated and intelligent people, while black men are considered to be deficient in intelligence and incapable of culture. In explanation of his map of the 'Geographical Distribution of the Chief Modification of Mankind,' Prof. Huxley says, 'In the accompanying map, therefore, the deep blue color is given not only to Australia, but to the interior of the Dekhan (where the black Dravidian tribes are). A lighter tint of the same color occupies the area inhabited by the ancient Egyptians and their modern descendents. For, although the Egyptian has been much modified by civilization, and probably by admixture, he still retains the dark skin, the black, silky, wavy hair, the long skull, the fleshy lips, and broadish alæ of the nose which we know distinguished his remote ancestors, and which cause both him and them to approach the Australian and the Dasyu more nearly than they do any other form of mankind.' And Mr. Hyde Clarke has proved from the standpoint of history and language that such a racial affinity exists between the Dravidians, the Australians, and the Hamites of Northern Africa.

"The fear of falling into the same line of descent with a black race has led the French ethnologists to proclaim that their pre-Celtic ancestors were Finns or Mongolians. The complexion of so-called black races is, however, as varied as that of the Mongolians, and there are some of the latter which fully equal the deepest violet-black tint of the former, while some of them possess cream-colored and coffee-colored skins as light as the whitest of the others. In like manner it was attempted to confine the red complexion to the aborigines of America; but it is also found in Asia, in Formosa and Corea, and in Africa, in Abyssinia and Soudan; and Hamilton Smith once declared that the fishermen of Bengal were still redder than the redskins of North America. We should think that the sensitive mind might find consolation in the fact that the Celtic ancestors of the first immigration mingled with the dark people of Western Europe probably as early as twenty-five centuries ago."

Here he does not go back far enough, for the ancient Greek and Roman historians have nothing to say on what would have been to them an interesting historical fact, if the races

neighboring Rome in her early days—so intelligent and advanced as our writer says they were—had been black. We await further developments.

THE KAFFIR POSTMAN.

THE reader who has been familiar with this publication for several years may remember certain sketches of Kaffir life and character which, from time to time, have ap-

peared in these pages. The Kaffir has always been a most interesting subject to the African explorer, for it would seem as if in him certain extremes of human capability for good or ill meet. Physically, the Kaffir youth and



KAFFIR POSTMAN.

man form as seen in ancient sculpture, but we need only to travel to Southern Africa to see similar forms, but breathing and moving, not motionless images of marble, but living statues of bronze." The important reason for

man form as seen in ancient sculpture, but we need only to travel to Southern Africa to see similar forms, but breathing and moving, not motionless images of marble, but living statues of bronze." The important reason for

this perfection of bodily development in a barbarous race is found in the Kaffirs' temperate mode of life, constant activity, and freedom from any of the conventional restraints of dress tolerated, if not enjoined, by our civilization.

Their simple, natural (the use of tobacco excepted, which, we suppose, was introduced and encouraged by European colonists), practices keep them in perfect health, and guard them against many of the diseases and evils of Europeans. The young Kaffirs are marvelously swift of foot, speed being reckoned by them as a chief characteristic of soldierly eminence, and their powers of endurance are as astonishing.

In the illustration we represent a Kaffir *in costume*, carrying a letter. One will make a journey of sixty or seventy miles on such an errand, and without experiencing much apparent fatigue. The Rev. J. G. Wood thus speaks of the Kaffir's manner of acting the postman:

"Taking an assagai or two with him, and perhaps a short stick with a knob at the end, called a 'kerry,' he will start off at a slinging sort of mixture between a run and a trot, and will hold this pace almost without cessation. As to provision for the journey, he need not trouble himself about it, for he is sure to fall

in with some hut, or perhaps a village, and is equally sure of obtaining both food and shelter. He steers his course almost as if by intuition, regardless of beaten tracks, and arrives at his destination with the same mysterious certainty that characterizes the migration of the swallow.

"It is not so easy to address a letter in Africa as in England, and it is equally difficult to give directions for finding any particular house or village. If a chief should be on a visit, and ask his host to return the call, he simply tells him to go so many days in such a direction, and then turn for half a day in another direction, and so on. However, the Kaffir is quite satisfied with such indications, and is sure to attain his point.

"When the messenger has delivered his letter, he will squat down on the ground, and wait patiently for the answer. As a matter of course, refreshments will be supplied to him, and, when the answer is handed to him, he will return at the same pace. Europeans are always surprised when they first see a young Kaffir undertake the delivery of a letter at so great a distance, and still more at the wonderfully short time in which he will perform the journey. Nor are they less surprised when they find that he thinks himself very well paid with a shilling for his trouble."

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall !
Thou art the nurse of virtue.

PERSONAL INDEPENDENCE IN WOMEN.

THE drawbacks incident to a woman's successful career in literature or in art are too often overlooked, and her failure to attain great results is hence wrongfully attributed to lack of brains, when, in fact, it is want of time that limits her achievement. It is the custom to sneer at all the efforts made by the sex, and the partial recognition given them is granted more as a concession than as a right. The fact that she is condemned to follow the dictates of society, and live in the social world altogether, is an undeniable

cause of her inferiority; and the fact that the majority of the sex make no effort to release themselves from the thralldom is another painful evidence of their lamentable lack of energy and education. Social duties are the most irksome, onerous, and, to cultivated people, the most distasteful, save when confined to strict limits, that ever existed. Housewifely and maternal duties and cares are not half as heavy, nor are they to be compared to them, for the latter are accepted as a pleasure mostly, while social exactions are

endured because it is the way of the world. To depart from the custom of society, and firmly to resist it, requires the heroism of a saint, and the strength of character that is rarely developed in the women reared under its baleful influence. We have some pioneers in this reform; we have always had isolated cases, but the masses of women devote their lives to visiting one another, and going to and giving entertainments, as though it were the sum total of existence, and nothing higher or nobler could be devised. And this is the reason that as women grow older, they are shelved and labeled "old women," and are despised for that very superficiality and ignorance which they imagined was so charming in them as young girls and middle-aged women. Narrowed and confined in intellect, intolerant and insincere in sentiment, and childish in action and duty, they flutter along the bright side of life until it ceases to exist, and then they sit down in the meridian of existence helpless, aimless, and unhappy, instead of rising as the dignity of years is put upon them, and growing in strength and wisdom until the perfection of life is reached in death.

It is hard to attain individuality in mediocre society, for your friends belong to the commonplace class, and maybe your own family is ill-prepared to admit the possibility of personal individualism. Then the tide is against you; no preparations have been made for an aspiring, ambitious nature. Your sex will condemn the exhibition of any sterling quality that is likely to grow and develop into even partial greatness, and the small fry of both sexes will hoot and howl wherever the imprint of your strong, brave soul is seen or felt. To be a woman, and to be imbued with an earnest desire to be something above your real existence, is to stem a current whose force is all against you, and whose power of resistance requires more courage than can be dreamed of until the trial is made; and the battle is a fruitless one unless you persevere until the end, and leave behind you an example that will be a lamp for others who desire to be guided in the way that you have trod.

Suppose you are left to earn your own bread, and you have the ability to be a success. You find the beginning hard because

it is so almost impossible to break loose from the social bondage into which as a woman you find yourself held. The bars have been so brightly gilded all your life, that you did not know until you attempted to widen your sphere that there were any bars there at all. Do not, then, in the moment of your awakening to your actual condition, beat against them. Study them patiently; learn of whose make they are; who is responsible for them; why they are hedged about you, and for what reason they were forged so tightly. There is one thing needful to sever them, and unless you have this do not pit yourself against them. A firm determination, coupled with a patient resolve, will gradually release you. The exercise of will-power means growth, and, in growing out of their reach, you lose sight of their existence.

See how you are hampered in the beginning! You strive and strive until you faint by the way-side, and yet your friends offer you no other consolation than that that found in opposition to your plans. Even this you can turn to good service eventually, but at first it is sadly discouraging. If you try to accomplish your work at home, you find the battle twice as hard to fight as you would if you went out by the day to labor. Your sex have been taught always to despise labor, and they will not forgive you for the innovation. But it is the wisest way to begin, particularly if you are strong enough to meet the brunt of the affray, at the start. Petty trials are as thick for you as down on the thistles, and they wear on you more than great sorrows would do, but it is just these that crush most women; so begin with them, study them intelligently, find the cause and remove it.

The hardest trial to a woman of nervous energy, ambition, and occupation, is the daily demand made upon her time by her acquaintances of the day. Women she may have met accidentally, and been thrown with for an hour or an evening, call upon her, ask favors of her, try her sadly, and then depart to come again, seemingly with the intent to get the benefit of her diligence and effort. Men who in business dealings have learned to know her, call to settle some trifling point, and then come again because it is agreeable to them to do so, never stopping to consider that they are a tax, and oftentimes a bore,

and never so necessary to her existence that they need stay an hour to transact a matter that is of no importance to anyone but themselves.

A woman of this stamp should early learn to avoid favors; they cost too dear. A bouquet of flowers, an evening at the opera, or any other unnecessary kindness, often is paid for by hours of hard service at entertaining, or else by attentions that are undesired and undesirable to a woman who, to grow in strength, must grow apart, and who to succeed must not be embarrassed by so-called friends. Learn early the value of personal independence; strive to live above society, and aspire to that culture and grace which renders it unnecessary. Rejoice in your single-heartedness; delight in being magnanimous, for a woman to be really independent must be lofty of soul and above the masses in every moral attribute. Rid yourself of women who hamper you by their society; avoid as you would a pestilence women of vulgar instincts and ordinary attainments.

Poor society is worse than solitude to even less earnest women than yourself; to you who have a life pursuit, and are pursuing it, is simply a calamity. You may offend, but the loss of strength to you is more than the goodwill of small natures. Finally, to have the most perfect liberty in any calling, to stand highest in any career, learn to act and live without a thought of variableness; go deep down into the recesses of your own nature for that guidance which can not be extended to you from outside sources, and, ignoring all drawbacks, strive for a higher plane of existence. Despising littleness and selfishness, plant your feet firmly against them, and, expressing the holiest emotions of your own soul, accept nothing less from those about you. Life is to each of us whatever we make it for ourselves, and if circumstances sometimes control our actions, they no less frequently adjust our difficulties, and, in the long run, the battle is to those who fight it, and the victory to those who win it by hard strokes.

LAURA C. HOLLOWAY.

THE FLOWER SELLER.

"POOR woman!" now I wonder why
They call me so!
They do not know
How many treasures I've laid by!
I am not poor! no poverty
Is there in love—
And yet I move
Sweet honest hearts to pity me!
I poor—with all that's gone before?
With all that waits
Beyond the gates
Till just this little life is o'er?
Because I do not wear my wealth
Upon my breast,
A public test,
They cast me pitying words by stealth.

Because they miss in all this strife
The songs I hear,
They cry, How drear
Must be the echoes of her life!
I poor? Ah, well—we'll let it go—
What did you say?
You want to-day
A cross of flowers all white? I know.
No doubt they'll say the same of you
As your black gown
Glides through the town—
But then you'll know it is not true.
Their costly gems, however bright
And rare they be,
Seem cheap to me
Beside this little cross, all while!

IDA WHIPPLE BENHAM.

SOME MEN'S IDEAL OF A WIFE.

A JESTING correspondence between two bachelors has recently come under my eye. No matter how or where I obtained sight of both sides of this interesting debate. To marry or not to marry—that was the question. I did not rob Uncle Sam's mail-bags, nor pry into any one's affairs uninvited. Nor shall I betray any confidence by giving to the pub-

lic the thoughts suggested, since I give no names, although both, being publicly known, would give weight to my words.

One of them says, in response to a likeness sent him in jest, "I like the looks of the photo, but can not tell by it if the original has black hair and blue eyes, which are my ideal."

The other says, "I will just state my ideal

of a lady. Size small, complexion light, eyes blue or light, dark hair, a good education, one who understands music, and is a good player. One who is a female and *not* masculine—tender, kind, affectionate, and understands domestic affairs.”

I suppose I ought to take up the points of this description in order, but I will first mention the first thing that impressed me as worthy of note.

These were the views of two men—this correspondence was not boyish nonsense—they were each far beyond the age of frivolity, one being twenty-eight and the other twenty years older. They were each educated, one being a clergyman, the other Principal of a High-school. They were each well acquainted, probably, with the principles of Hygiene and Physiology. They had each given us their ideal of womanhood. What word, in either of these descriptions, indicates a desire that their doll shall have a soul? That it shall have one high hope, one noble aim, one unselfish aspiration? That it shall have *any* hope, aim, or aspiration other than to please its owner?

True, one of them requires “a good education,” but the precise meaning of that term, as applied to woman, is inferred from what follows. It seems highly probable from the remainder of the sentence that a few sheets of music, a stated amount of piano pounding, and a knowledge of the cook book, are about all that is necessary to fill the bill, and receive in payment—a chance in matrimony.

If with that chance went the pure, deep, *appreciative* love of a noble man, it would indeed be payment for a lifetime of devotion; but such a love is not won by a peculiar shade of hair or eyes, small size, or an education of mere accomplishment.

“Small size”—this is the echo of most men’s wishes. They want some one to pet, to fondle, to protect, *they say*; and this is true when they feel good-natured. Cynical women say they want some one they can tyrannize over, but I am not inclined to take a cynical view of the subject. I believe very few men willfully tyrannize over their wives and children, but the tyranny is there, nevertheless, and intellectual men, such as the world admire, are most prone to exercise it. They are so wrapt in their own plans, theories, and speculations they do not even discover the fact that their own households are famishing for the bread of love, and fainting for the gushing springs of sympathy. They are so accustomed to adulation abroad that the simple home affection seems tame and

spiritless; as the purest water of the deepest well is tasteless to one accustomed to the sparkling and burning, but poisonous draughts of intoxication.

In our zeal to vindicate the “lords of creation” from the charge of willful tyranny, we are leaving our two bachelors and their imaginary wives too long neglected.

Small size is a man’s fancy, not the dictate of his physiological knowledge. It is an almost universal fancy. The larger, rougher, more burly the man, the more sure he is to prefer a small-sized woman. “I am determined to have a wife whom I can pick up in my arms and carry her over all the rough places,” said a young farmer whose softest tones sounded like a clap of thunder. As he spoke he snatched the largest and heaviest girl in all his acquaintance, and lifted her over the brook. His words are echoed in the selection made by most large-sized and stentorian-voiced men. Their ideal is of something the reverse of themselves, and thus fragile figures and low tones are, to them, the perfection of feminine attraction.

My solution of the problem lies in the supposition that it is an uneducated action of Philoprogenitiveness, shown in the desire for some small creature to pet, to fondle, to caress. Those who have watched the world for fifty years know how often is enacted the sad tragedy which may be named, *The Bride of a Year*. Those young men who are not specially desirous of enacting the part of the bravest husband of a buried wife, the helpless father of a puny babe, will be wise enough to let their Philoprogenitiveness wait until healthy, happy, full-sized wives give them that best blessing of the Lord, a good supply of healthy, happy little folks to pet.

Next in order upon our bachelor’s list, and nearly akin to the first requirement, comes the emphasized resolve that his future wife shall *not* be masculine. The Hibernianism which stipulates she shall be a female has no other excuse than the very poor one that this use of the word female, instead of woman, is too common. We presume he means she is to be a true woman, and possessed of all womanly qualities. Then why did he not say so? It is simply revolting to a woman of delicacy and culture to have herself, or others of her sex, called by a name which indicates sex merely, and may as readily be applied to—well, any other creature of the feminine gender.

For the benefit of our two bachelors, I will state just here that the corresponding blunder

in the church marriage service, by which the couple are pronounced *man* and *wife*, is fully justified by the fact that a man is never *quite* a man until he has taken unto himself a wife.

Those who agree with me in my faith in the eternal fitness of things, will not quarrel with him for wishing her *not* to be masculine. *Most* people will agree upon the abstract statements that a woman should be womanly and a man manly! It is only when we begin to apply these statements, and ask what are the qualities which it is man's special prerogative to possess, that the answers become a little mixed, and wise people agree to differ, until the results of education and experiment enlighten us.

A paper lying near me contains, in a story, this sentence in regard to the girls in that "land of the Pikes," which has become so famous since certain writers have built up a little notoriety upon an exaggerated description of a certain class of its pioneer settlers. The writer says: "They can catch a colt in a woods pasture, and climb a high fence much easier and more quickly than you can. One does not like to see a woman too competent in these things."

Perhaps not, Mr. Story-teller; but I happen to know one or two of those same girls, and one of the most graceful and delicate women I do know, the beloved wife of an intellectual husband, and the happy mother of a band of rosy children, was born and educated in that same much-abused Pike County.

And I know a bevy of fair sisters who can row a boat, plant a field of corn, or haul a load of wood to town as well as one of their father's hired men, and they are not the least bit masculine either. They are the prettiest girls in all the country around, and it is often said, "Oh, well! it will do for them to do so. Their father is so wealthy, and they are so pretty and ladylike, they can do anything they please. It would not do for common girls to imitate them. They would be talked about."

Yes, verily, and they are talked about. People talk of their bright eyes and clear complexions, and gracefulness of form and manner. Most of all, they talk of the wonderful bravery with which these daughters of wealth dare to set so good an example to their sex; but no one ever calls them masculine.

As for catching colts, that is not a masculine accomplishment! A man will take a halter and travel round a pasture until he is tired; and then he will get a few boys to help him, and after the creature is tired out, even if not spoiled for life, he is caught, and perhaps beat-

en by way of teaching him to beware of ever being caught again. A woman will stand still, holding out her hand; and that same colt will come to her and stand by her side to be petted and caressed.

Neither is climbing fences masculine. Boys, indeed, climb fences, but men think it undignified, and will take down any amount of clumsy bars, or lift a heavy gate, rather than climb. Perhaps I am unfitted to appreciate the praise "not masculine," since my sensible parents saved me from an early grave by allowing me to romp with my brothers at will. Certain it is, that some of my happiest memories are of the tree tops in which I used to study my lessons, and the dear old swing which, from an oak on the side of a hill, sent us rushing over the chimney of a two-story house. As I shall never agree with these bachelors in that matter, I will pass to the climax of the necessary qualifications.

"Understands domestic affairs." So this small-sized, ideal wife of yours is expected to perform as much work, and endure as many hardships, as if she had a physical frame equal to such labor. You are not content to have

"A dear gazelle

To glad *you* with its soft black eye,"

you must require of it to perform the labor of the dray-horse and the ox. And when is your musical lady to have time for practicing her accomplishments?

To be serious, I believe woman's ideal to be usually of the soul. Man's ideal is usually of physical beauty. She wants a being far above her in all possible gifts and graces, for love with her is little short of adoration. He wants a pretty doll to please his fancy and a good cook to pamper his appetite. They marry, and both are doomed to disappointment. She finds her knight, poet, or hero a common man, with very unknightly manners when he is vexed with very unpoetic wants in the way of beef steaks and buttons, and very little heroism when dinner is cold or badly served. He finds his doll's beauty does not sweeten the sour bread or make palatable the burned steak; or his cook's flushed face or hasty toilet does not adorn his dinner-table.

Her ideal was a delusion, but it was a noble one, and it has ennobled her to have cherished it. His has been more practical, but it has gone, and he is too practical to mourn for it long. It is the mission of Phrenology to educate the world to a higher ideal, and to make that ideal a blessed reality.

MRS. JULIA A. CARNEY.

THAT TROUBLESOME BOY.

A DESPAIRING father writes us: "I am at a loss as to what to do with my son, a boy of fifteen, who has so far been well brought up—that is to say, he has been kept in school from his sixth year to the present—and he now plays truant, tells lies, swears, smokes on the sly, and is ruining his health by a bad personal habit, learned from other boys. We (his mother and I) have often corrected him most severely, but without avail. He has run away twice, and threatens to go again. He has a desire to become a sailor, though he knows nothing of it save what he learns by reading sea-stories. We are more distressed about his untruthfulness and his secret bad habits than anything else, fearing if these be not overcome that he will surely go to destruction, and bring disgrace on his name and kindred. What should be done with him? Any advice given by letter (not through the JOURNAL) will be cheerfully paid for. Truly yours.

* * *

[We omit name and address, but print both the letter and our answer, believing it will hit other and similar cases. First, we must inquire what have been the lad's associations; what and who his playmates; what were the relations between father and son; were they those of intimacy, good fellowship and affection, or were they those of severe authority, on one side, and of skulking fear on the other; was there love, trust, freedom, or was there dread, coercion, hatred? Does the father use tobacco? Does he swear? Or, is he a praying man? "Like father like son" is an old saying, and is more frequently true than otherwise. What part has the mother played in the training of her son? Were they not at least confidential friends? Did she not teach him the sinfulness of sin and the beauty of truthfulness, integrity, temperance, chastity, and the nobleness of a pure and true manhood? Or did they quarrel, scold, fight, to "see which could whip?" Such scenes do occur between ignorant, ill-tempered mothers and unwelcome, ill-formed, and unfortunate sons.

But the boy is here. His follies and his crimes will not yet justify imprisonment nor death. He can not be lawfully put out of

the way. He must be endured. His parents are largely responsible for his waywardness. Their unwise whippings did no good. Instead of governing by love, they doubtless attempted to do it by severity and by fear, and failed.

One thing, which may be done, is placing the boy in a military school, or on board of a school-ship, or in a reformatory—or let him choose a pursuit for himself, and then follow it. If trained in a military school, or in a naval school, he will be disciplined, subdued, and taught. If in a reformatory, wisely conducted, it will be the same. But to the one or the other he should go. If placed on shipboard he will not "run away," and he may make a navigator. If in a military school, he will be taught engineering and other useful subjects, besides the arts of war, which can be turned to good account in civil pursuits.

But why not take him into partnership at home? If the father be a farmer, a mechanic, manufacturer, or merchant, take the lad in and teach him the business. The boy is here, in this world, not of his own choice, but for a purpose, and it devolves on the agents of his existence to put him in the way of education, development, improvement, usefulness and happiness. He is not to be kicked and cuffed about like a dog, and then expected to exhibit angelic qualities. Would it not be as well for men and women first to qualify themselves for the high and sacred duties of parentage before entering into the relations of wedlock? Should they not first learn how to govern themselves? Should they not anticipate the wants and necessities of offspring, and provide therefor? We hold parents largely responsible for the success or the failure of their children.

WHY EVERYBODY IS CROSS.—"O, Mary!" said a little boy, named John, to his sister, "I have found a pretty thing. It is a piece of red glass; and, when I look through it, everything looks red, too. The trees, the houses, the green grass, your face, and everything is red."

"It is very beautiful," Mary replied; "would you like me to tell you how to learn a useful

lesson from it? You remember the other day you thought everybody very cross with you. Now you were like this piece of glass, which makes everything red *because it is red*. You

were cross, so you thought everybody about you cross, too. If you are in good humor, and kind to every one, all will seem kind to you. Try if they will not."

THE EAGLE OWL.

THE European horned or eagle owl is the largest of the owl tribe of birds, even exceeding the great American horned owl in stretch of wing by a few inches. In length, when full grown, it is about twenty-six inches, its wings extended measuring five feet. This bird is found more or less abundant in all the

really fine appearance to the bird. The young, when emerging from the egg, are covered with a white down which commences in about three weeks to change to a brownish gray. When about five weeks old the feathers begin to appear, and their growth is rapid, the young being able to fly at nine weeks, and at twelve being quite as large as their parents.

The habits of the eagle owl in freedom are similar to those of other predatory owls, but in confinement it generally becomes docile, and seems only to require sufficient food and kind treatment to be made contented with its cage and the society of man. An American authority has it that in confinement this bird "is fierce, hissing, snapping, and barking when irritated." We are told by Mr. Newman, of the London Zoological Society, that it is easily domesticated, but evinces much boldness and ferocity in the breeding season. In England its beauty and size have made it a favorite in aviaries and zoological gardens, and large numbers are imported annually from Sweden and Norway to supply the demand for them. Success has attended the breeding of them in confinement. In Arundel Castle a colony of eagle owls has been maintained for over sixty years, and is regarded a valuable appendage to the donjon keep of that venerable pile.

Sometimes, however, one of these captives escapes from the control of his master and tries his broad wings in the open field, usually bringing up in the forest, where he subsists on rats, mice, and moles until shot by some sportsman. On the authority of an English paper it is stated that the eagle owl has never been killed in Ireland, a remarkable assertion when it is considered that the power of flight possessed by the bird is great, and that a channel of no very considerable breadth separates England from that country. The *Zoologist* for 1849 states that several of these birds had been killed in one neighborhood, that of Melbourne in Derbyshire.

The American screech owl, which is familiar enough to all our readers, is a small bird compared with the above, rarely exceeding ten inches in length and two feet in spread of



countries of Northern Europe and in the forest and mountain regions of Switzerland, Italy, Spain, and Sicily. On Mount Ætna it is said to be especially numerous. The general color is a brownish red, with spots and markings of black, brown, and gray. This variety of colors, together with its great dark eyes, impart a

wing. Its plumage, when full-grown, is ashy brown, with brownish black stripes and matings of the same color. Its food is chiefly of beetles and field mice, which it seeks at night in the neighborhood of farm-houses and gar-

dens. Its mournful, tremulous hoot, in reference to which the superstitious and timid have conceived many strange and dire notions, even to the extent of accounting the bird a harbinger of ill, is too well known to require description.

HYGIENE OF INFANCY.*

THERE are many little things respecting which mothers and nurses are apt to be careless, or of which they are really ignorant, that greatly affect the health, comfort, and welfare of the little one, and perhaps stamp it for good or evil during all future life. "Just as the twig is bent the tree's inclined."

THE BUSINESS OF INFANTS.—Let all who have the care of infantile humanity understand that the business of infants is to grow. To grow normally they must be kept in a healthy condition. They must breathe at all times, sleep all they are inclined to, and eat regularly. They must have proper clothing and due exercise, but this is generally self-regulating. Never mistake infants for toys or playthings. Never employ them to amuse yourself or entertain company. Never exhibit them for the purpose of reflecting the inherited charms and qualities of which the parents are proud—perhaps justly. In their own good time and manner, if they are well nourished and well rested, they will manifest all the virtues they possess without prompting.

Recollect that character, as well as flesh, may be made or unmade in infancy. The seeds of virtue or of vice may be sown by a word, a look, a smile, or a blow. "Mar the young sapling, and the gnarled oak will tell of thee for centuries to come." Infants are as impressible as the plastic clay, and may be easily molded into vessels of honor or dishonor. If born with a sound organization, and normally trained and educated, they will never show any vicious disposition, except when abused, and then the "ugliness" will be merely the manifestation of the first law of all vital organism—self-preservation. Every thing that lives must defend itself or die. This is true not only of every living organism as a whole, but of each individual, organ, structure, and tissue. It is true of the brain, the muscles, the nerves, the bones,

and even of the white corpuscles of the blood. And it is a very important truth—a truth which, when fully realized, must greatly modify, if not revolutionize, the manner in which civilized nations train and educate their children.

This law of self-preservation is manifested when the gorged infant vomits the food it can not digest, when it sneezes because of dust or bad air, when it purges because of irritating matter or cathartic medicine in its bowels, and when it collapses into stupor from an over-dose of "soothing syrup." The same law is manifested when the infant is attacked by mental impressions, angry words or deeds, harsh handling, or harsher looks, and what is called "punishment," whether it be shaking, spanking, cuffing, or whipping, or any other mode of inflicting pain, necessarily put the infant on its defense. And if it grows up in this warfare against adverse influences, the ill-temper and vengeful passions, thus developed and cultivated, will "grow with its growth, and strengthen with its strength." They will become its "second nature." And now the great lesson deducible from these considerations is, never punish nor correct a child in anger. If you can not keep your own temper you are not fit to govern a child. *Never punish a child at all*; but correct, instruct, advise, always. Civilization ought to learn a lesson from savage life on this subject. When the Indian child does a naughty thing, the parents, instead of whipping it, take it into the woods by itself and give it a *good talking to*.

Children should never be scolded at all, nor reprimanded in company. If necessary to admonish or correct before folks, do it in mild language, and with gentle manner, rather suggesting the right than condemning the wrong. Nothing tends more to sour the disposition, alienate the affections, and harden the heart, than wounding the sensibilities of young children by reproaches or criminations in presence of company. Many parents lose all governmental influence, all control of their children in this manner—the more they scold, fret, pound, or whip, the more undutiful the child becomes.

* THE MOTHER'S HYGIENIC HAND-BOOK, for the normal development and training of women and children, and the treatment of their diseases with hygienic agencies. By R. T. Trall, M.D. 12mo, cloth, 186 pages. Price, \$1. S. R. Wells, Publisher, 389 Broadway, New York.

The principle I am advocating ought to be applied to common schools, and the rod abolished forever. "Strike a man!" said William Ellery Channing, in one of his thrilling addresses against human bondage. With a thousand-fold emphasis might one exclaim against striking an utterly helpless and non-resistant child.

EXERCISE.—The best general rule is *let alone-ness*. I am of the opinion that all the contrivances in the world for exercising nursing infants have done more harm than good. Set to itself on a smooth surface out of the way of all burning or bruising instrumentalities, it will exercise all it can profitably, and just in the manner that it should. It will first *demonstrate* with its little legs and feet, and lively arms and fingers; then roll its growing body about promiscuously; next creep on all fours, and finally essay the perpendicular, just as nature intended it should, and finally walk, run, hop, skip, and jump, "in the way it should go." It is true that some of the fashionable exercising apparatus in vogue—the elastic baby jumper, for example—may be nicely adjusted as to do no particular harm and possibly enable the child to get on its feet sooner than it would if only exercised in the natural way. But I fear that physical development is as objectionable as precocious mentality.

"BABY-TALK."—Never indulge in what is commonly known as baby-talk, nor let any one else address your child in that manner. Every word or syllable that is spoken to a child, however young, should be distinctly articulated and correctly pronounced, nor should the intonations be any different from those which are proper when speaking to an adult. Children are imitative creatures. They readily imitate your manner of mumbling, gibbering, and distorting language, and, perhaps, as they grow up, will "better the instruction." You should no more pervert or sophisticate the language you address to an infant a year old or less, than you should poison or adulterate the food for its stomach. Language and music are the clothing of our thoughts and feelings, and our speech and song should correctly represent them.

A child that is always addressed in proper tone and language, other things being equal, may speak with more propriety and grammatical accuracy at three or four years of age, than another child can at eight or ten, whose "teachers of elocution" have been baby-talkers. There is no shadow of reason for this silly custom. "Oh, reform it altogether."

AMUSEMENTS.—These of every kind should be as much out of doors as the weather will per-

mit. The difference between open air and house air is as much in favor of a child as of an adult. Indeed, it is much more important, for the dust, gases, and other impurities of indoor apartments, which would not be noticed by an adult, might seriously damage the more susceptible child. As soon as the little thing is able to toddle, its proper carpet in fair weather is the green grass, or a blanket spread on the *clean dirt*—nothing is purer than the uncontaminated earth. There is no objection to the baby-carriage, as a means of exercise and amusement; but in cities careless servant girls are very apt to jounce the infant over the gutters and rough places in a rough and injurious manner, which may damage it for life. Every nurse should be thoroughly cautioned in this matter. Besides riding in its carriage, or in the nurse's arms, and the use of the playthings already mentioned, no special amusements are called for until the period of infancy ends with the completion of the first set of teeth.

MISCHIEF OF IDEALITY.

"EVERY virtue has its corresponding vice; therefore, to be excessively virtuous is to be vicious."

"Here is something for you," I said, reading the above sentence to my friend, Mrs. Allen.

"For me!" the exclamation was full of surprise and reproach.

"Yes, for you; in some respects you are so virtuous that you are vicious; so good that you are bad."

"In what respects, pray?"

"Well, your Ideality, for instance, is a tyrant, and usurps the freedom of your household. The quality given you to make home beautiful, carried to excess in a few directions, makes home disagreeable, to say the least; Ideality, held in check, makes home a heaven; ungoverned, excessive, it makes home a place that husband and children seek to escape from."

"It is necessary that I should have things perfectly neat and in order."

"It is necessary to some persons to steal."

"What do you mean?"

"I mean that an educated and trained will must be the arbiter between our unbalanced and conflicting qualities. If Acquisitiveness is excessive, and tends to interference with the rights of others, it must be put down

resolutely; but no less must the finer qualities be governed if they tend to interference with the general good. Your children have as good a right to a certain degree of freedom and happiness as you have to ideal neatness and order. We must train our Ideality to take in the whole scale of development, and not the perfection of one quality. You think incessantly about perfect neatness, while the children in an out-of-the-way corner, where they are not afraid of spoiling anything, plot about the best way to circumvent your restraint."

"How do you know that?"

"I heard Jack saying this morning that he was going to invite the boys Thursday night—Bridget's day out—because mamma was 'so afraid of her old carpet.' He intends to take his friends into the kitchen; and Sue confides to me that she don't enjoy inviting

the girls, 'it makes mamma so nervous to have company.' Our characters are in process at present, and to insist on the perfection of a little part, at the expense of the building, is a great waste and wrong. Neatness is a virtue; but patience with the free, joyous, healthy carelessness of child-life is a greater virtue; and while you hold your ideal of Order in check, by an approach to ideal patience and sweetness of temper, you can cultivate Order in your children; you can win your husband to share your interest in the minor details of beauty. Remember that beauty is large, and that a carpet, or bare upholstery, or delicate china, are but trifling accessories. To lose the confidence, to destroy the reverence, to cloud the spontaneous joy of your children, to gradually drive your husband to seek freedom outside of home—these are the mischiefs of Ideality.

MRS. W. F. BUTTS

YESTERDAY.

How fair the earth was yesterday,
How green the meadows were!
The poet, Nature, had no need
Of an interpreter.
A golden haze enwrapt the hills,
A bright and ambient glow,
Like veil of mist, dropped low and kissed
The valley just below.
The violets their blue bells swung
Upon the grassy lea,
And starry daisies raised their eyes
Toward heaven wonderingly.

The meadows, in their sheen arrayed,
Looked fair as any bride,
It did not seem one beauteous dream
Of earth had been denied.
To-day the sky is ashen-hued,
The wind sobs on the heath,
Dire shadows lie upon the hills,
And on the vale beneath.
But, mirrored in the shining glass
Of loving memory,
The yester's sheen lies bright between
The somber mist and me.

HELEN A. MANVILLE.

ECONOMY.

WHEN I wrote this word I was not thinking as much of the slow accumulation and careful expenditure of dollars and cents as of something else which, to my mind, breaths more of the true spirit of the meaning. Shakspeare says:

"Who steals my purse, steals trash;
'Twas mine, 'tis his, and has been slave to thousands;
But he who filches from me my good name,
Robs me of that which not enriches him,
And makes me poor indeed."

Now, none of us suppose that Shakspeare would have borne the loss of his purse with more philosophical resignation than the rest of mankind, or spoken of this trashy needful

in such scornful terms, if he had not placed it face to face with something so far superior.

Money is a question of industry, and as long as we have health, there is money stored up in our brains and in our sinews, of which we are the lawful bankers, and which is subject to our draft; but when we contemplate the economy of something that, once lost, is lost forever, the question assumes a new importance. For instance, our vitality is part of our stock in trade. We start out in life, usually, with a portion sufficient to our needs. To illustrate: we will suppose, when upon the eve of a journey, a man was given a sum of money sufficient to carry him to his des-

tination in comfort and safety, but assured that this would be the extent of the supply, and that if he grew careless or wasteful he would be set upon by robbers, or perish by the wayside. Would we feel called upon to pity him, if he should wantonly waste this precious capital? Yet this is but a true picture of our extravagance in the matter of vitality; we fling it away upon our amusements, our appetites, and our avarice; and, before the shadows of middle life fall athwart our paths, we are set upon by robbers in the shape of disease, or sink down upon the threshold of usefulness, utterly drained of strength and vigor. Nature intended that we should live temperately, and her penalties are severe and certain in the end. We are always ready enough with promises of reform, but somehow that artful villain, Self-indulgence, always has a key that will fit the locks of our resolutions, and he just glides in and takes us by surprise, and, once face to face with him, we are cowards in our own cause.

We are all economizing more or less in the wrong direction. For instance, the (too often imaginary) need arises for a new garment. But there is that new book, too, whose praises are in every one's mouth. We pause irresolute, but taste (?) soon triumphs over judgment. She whispers such captivating hints about that new spring suit, with its bewitching trimmings, and of the lovely shade of that ribbon, etc., and it is soon all over with the book. So we quiet conscience in some way, and content ourselves with less brain furniture, while we minister to our vanity.

And the way we economize time is about on a par with the rest of our wise operations. Some of us think the day isn't good for much except to sleep in, and so we go out three or four nights in a week, and keep our foolish eyes bright by excitement, and call it fun; but by-and-by we find that we are delicate, and that the dyspepsia is drawing its green shade over our vision. We complain that we are wretched and tired of living, and look around for sympathy. If we can, we go to some fashionable water-cure; and if we can't, we have the blues, and write poetry to inflict on some unoffending editor. Whenever I see a garland of pale verses, overflowing with sentimental ecstasies about dying, and

shadowed with dismal reflections about this vale of tears, I always think that dyspepsia is at the bottom of it, and long to recommend to the authoress a liberal prescription of broom exercise, early rising, and Graham bread, until her physical organization becomes sound and her mind acquires a healthy tone.

EDITH LYSLE.

JUDGING BY FACES.

A MAN'S character is stamped upon his face by the time that he is thirty. I had rather put my trust in any human being's countenance than in his words. The lips may lie, the face can not. To be sure, "a man may smile and smile and be a villain;" but what a smile it is—a false widening of the mouth and creasing of the cheeks, an unpleasant grimace that makes the observer shudder. "Rascal" is legibly written all over it.

Among the powers that are given us for our good is that of reading the true characters of those we meet by the expression of the features. And yet most people neglect it, or doubt the existence of the talisman which would save them from dangerous friendships or miserable marriages; such fearing to trust a test so intangible and mysterious, act in a defiance of their impulses, and suffer in consequence.

There are few who could not point out an actual idiot, if they meet him, and many know a confirmed drunkard at sight. It is as easy to know a bad man also. The miser wears his meanness in his eyes, in his pinched features, in his complexion. The brutal man shows his brutality in his low forehead, prominent chin and bull neck. The crafty man, all suavity and elegance, can not put his watchful eyes and snaky smile out of sight as he does his purpose. The thief looks nothing else under heaven, and those who lead unholy lives have so positive an impress of guilt upon their features that it is a marvel that the most ignorant and innocent are ever imposed upon by them.

Perhaps it is the fear that conscientious people have of being influenced by beauty, or want of it, which leads so many to neglect the cultivation of the power which may be brought to such perfection; but a face may be beautiful and bad, and positively plain and yet good. I scarcely think any one would mistake in this way, and I aver that when a man past the earliest youth looks good and pure and true, it is safe to believe that he is so.—*N. Y. Scotsman.*

[We think the word *discerning* character by faces better than *judging*. One discerns intuitively, when he could not give a *reason* for his impression. If one *judges* another, he is supposed to have other grounds than his intuitions for his judgment.]

Department of Literature, Science, Education.

FAMOUS TREES OF THE WORLD.

TREE-LIFE all over the world, in every age and every clime, under sunny southern skies or the bleak, bare heavens of the north, has its wonderful giant-like monarchs, its hoary old sages, rugged with age, its poetical, love-dreaming and love-suggesting specimens, and its useful, plain, honest members. In fact, like the human life, the forest denizens have their world within themselves, their kings and sages and plebeian hordes.

The subject is a vast one—thousands of trees bear names or attributes worthy of description. The most remarkable species, as to size, are the baobab of Africa, the *coniferae* of Upper California, the banyan of India, the lindens of Germany, and the oaks and yews of England.

The African baobab (*Adansonia digitata*) is held by botanists to be the oldest and largest specimen of vegetable growth in the world. Adanson saw one in the Cape de Verde Islands within whose trunk, overlaid by three hundred close layers of wood, he discovered an inscription carved by two English travelers three centuries before. By the aid and position of this inscription he was able to arrive at a correct estimate not only of the length of time which it took the tree-stem to grow, or increase in size, but the exact age of the tree itself, which he puts down at 5,150 years. The stem ordinarily attains only ten or twelve feet in height, but is thirty-four feet in diameter, this immense foundation being required to support the foliage which grows upon it. The main branch rises perpendicularly sixty feet, and from it shoot other branches extending horizontally fifty or more feet on all sides, and which, being loaded with the most exuberant growth of leaves, forms a verdant crown of sometimes an hundred and sixty feet in diameter, a single tree giving thus the appearance of a forest. It is called by the natives by a name which signifies “a thousand years,” which would seem to be in agreement with the calculations of its age by

all herbalists. A group of these baobab trees crowning the summit of its rocks, gives the name to the Cape Verde Isle—“green cape.”

The next in size, and of course in age, are the celebrated pines of California, the *sequoia gigantea*, known by various popular names among the miners and other inhabitants of the district in which they grow: “The Mammoth Washington Tree,” which was discovered by the naturalist Lob on the Sierra Nevada, at an elevation of five thousand feet; “The Miner’s Cabin,” which is large enough for a comfortable dwelling-place, being a hollow tree three hundred feet high with an excavation seventeen feet in breadth and thirty feet in circumference; “The Three Sisters,” three trees which, springing from one root, are so interlaced as to appear but one tree; another “The Riding School,” has been blown down by a terrible storm which swept over the valley. It has a hollow stem into which a horse can be ridden for seventy-five feet and turned round.

These trees stand in groups, and many of them attain four hundred feet in height. Judging from the rings found within those that have been felled, they are mostly over three thousand years old. Dr. Biglow tells of one which he measured: “Eighteen feet from the stump it was fourteen and a half feet in diameter. As the diminution of the annual rings of growth from the heart or center to the outer circumference or sapwood appeared in regular succession, I placed my hand midway, measuring six inches, and carefully counting the rings on that space, which were one hundred and thirty, making the age of the tree, by this computation, one thousand eight hundred and eighty-five years.” As to its size he says, “It required thirty-one paces, three feet each, to measure its circumference, making ninety-three feet;” and to fell it they were obliged to use pump augers and bore it. It took five men twenty-two days to lay it low, and the mere cutting down cost over \$500.

It is said there are over five hundred of these gigantic trees within an area of fifty acres, ninety of which are of colossal size.

At Chapultepec, Mexico, there is an American cypress (*Taxodium distichum*) which when the Spaniards entered the country, 1520, was called "The Cypress of Montezuma," being then of immense size, over forty feet in girth and an hundred and twenty in height. And the province of Oaxaca, in the same country, shows the cypress which sheltered Cortez and his troops still in a fine condition. According to De Candolle, these trees are four thousand years old.

A chestnut tree still grows upon Mount Etna called by the natives *Castagna di cento cavalla*, because an hundred horsemen can be concealed in its interior, which, being hollow, measures an hundred and eighty feet round. At Babylon stands a willow tree, in the ancient gardens of Semiramis, and supposed to be coeval with her reign. A peculiar sighing sound heard in the branches, and caused by some action of the wind upon them, is believed by the Arabs to be the voices of the spirits hidden among its foliage. As no bird or insect ever lights upon it, or flowers grow or indeed live near it, they think them evil spirits whose presence is a bane.

By the city of Neustadt, in the kingdom of Wurtemberg, there stood a linden tree which was antique in 1229, for it is written "that the city of Neustadt, then called Helmbundt, was destroyed 1226 and rebuilt 1229, near the great linden." It was so well known that for centuries Germans spoke of Neustadt as "the city near the linden." A poem of 1408 describes it as standing near the gate, its branches propped by sixty-seven stone pillars. In 1664 these pillars were increased to eighty-two, and in 1832 to an hundred and six. In 1832 the trunk, at the height of six feet from the ground, measured thirty-seven feet, and it was estimated in that year, when a terrible storm rendered it well-nigh a wreck, to be over eight hundred years old.

There are oaks in England planted before the Norman Conquest, 1066, and yew trees (*Taxus baccata*) still older. One at Fountain Abbey, Ripon, in Yorkshire, was said by Pennant, 1770, to be twelve hundred years old; another in a churchyard at Braburn, Kent, measured by Evelyn, 1660, was then

two thousand eight hundred and eighty years old, making it now over three thousand years, if still standing.

In the Baider Valley, near Balaklava, there stands a walnut tree which, though twelve hundred years old, has not yet "forgotten to be useful," but yields annually a crop of from eighty to one hundred thousand nuts. It belongs to five Tartar families, who amicably divide the fruit among them.

The finest specimen of the celebrated banyan tree of Ceylon is found at Mount Lavinia, seven miles from Colombo. Two roads run through its stems; some of its fibrous shoots have been trained, like the stays of a ship, to intercept the road, while others hang half way down with beautiful vistas of cocoa-palms seen through its pillar-like stems and leaves. It throws a shadow at noon over four acres of ground.

Cedars are found on Mount Lebanon, supposed to be the remains of those vast forests from which Solomon cut the timbers for the temple three thousand years ago. Maundrell counted sixteen still standing in 1696 that measured thirty feet, and were over an hundred feet in the spread of the branches.

The feathery cocoa-nut and fan-like palmyra of the Deccan countries of India, the hardly less beautiful date tree, useful for so many purposes that it seems as if a native Hindoo could scarcely get through life without it, are all trees of world-wide note, and many specimens of them are famous both for size and age. The date tree, besides providing the inhabitants of its vicinity with almost every thing used in their domestic economy, its fruit serving them as the chief article of food; the stems and leaves as baskets, mats, roof-covering, and carpet, is the source from which they imbibe their common drink, *tara*. Deep incisions being made in the trunk, a pleasant and abundant beverage exudes, both refreshing and invigorating if drunk while fresh, but intoxicating if allowed to ferment by exposure to the tropical sun. The *tara*, however, is much sought for when in a fermented state by the English soldiers, and causes many of the irregularities and crimes recorded of the troops in India. Indeed, it is said that a camp pitched near a "toddy tope," or date-grove, is sure of being disorderly.

Among the trees having claim to historic fame none are more worthily celebrated in our own country than the "Charter Oak" of Hartford, Conn., in which was concealed from British tyranny (1687) the charter of the colony for several years. And the "Treaty Elm" under which the good William Penn made his treaty with the Indians, 1682, and which stood upon the banks of the Delaware until the year 1827, when, in spite of the care taken to preserve it, it fell to the ground, and had a re-genesis in the shape of canes, snuff-boxes, and drinking-cups.

The walnut tree, originally called Gaul-nut from having been introduced into England from France (ancient Gaul) was once considered by herbalists to be efficacious in all diseases of the head, as it bore the *head signature* (*i. e.*, a resemblance to the head), the outer skin being the pericranium, the shell the skull, the kernel the brain. At the end of the sixteenth century walnuts did more service than cannon-balls, as at the siege of Amiens by the Spanish during their opposition to the ascension of Henri Quatre to the French throne a party of soldiers dressed as French peasants brought a cart-load of nuts to sell, and when admitted, as they passed through the gates let some of the nuts spill out, which the guards dispersed eagerly to gather up, and while stooping were set upon, killed, and the gate taken by the disguised peasants, who then admitted the Spanish army.

In ancient times the fig-tree was sacred to the gods. Its leaves were used for the crown of Saturn. Its branches borne in procession at the feast of Plynteria, when the statue of Minerva was washed. In the *Thargelia*, a feast of the sun, they wore the fig and played on flutes an ode to "the fig tree." The Romans honored it because Romulus and Remus were found under a fig tree, and it was considered a type of friendship.

The quince tree, a native of Cydon, in Crete, was sacred to Venus, and considered an emblem of love and happiness. By the laws of Solon the bride and groom were required to eat a quince together at the marriage ceremony.

The soap plant of California is not only beautiful but useful, the bulbs being preferred by those who use them to the finest

quality of soap. The botanical name of the tree is *Phalangium pomaridianum*. There is another tree, *Chelaria saponana*, found in South America, the bark of which is used as soap also.

The most beautiful tree of India, and, it is said, in the world, called by the natives *Jonesia asika*, bears a red flower resembling the ixora, of the most wonderful beauty and sweetness, while the denseness of its foliage is a marvel to behold. Another tree of India, the *Tamala* (*Xanthocynus picorius*) bears black blossoms of a most singular shape.

The mulberry, famous the world over, shall close this mere mention of celebrated tree life. Since the Babylonian lovers, Pyramus and Thisbe, in despair of the "course of true love running smooth," impurpled the spotless white of the mulberry blossom with their life-blood, this tree, with its dark-winged leaves, its sanguine-juiced fruit, has been sung by poets and lauded by scholars. The *Morea* of Greece is named from its fancied resemblance to the shape of the mulberry leaf. The Rev. F. Gastrel, of Stratford-on-Avon, has sent his name down to ignominious disgrace, having in the year 1786 "wantonly and brutishly" cut down the favorite tree of Shakspeare, a mulberry planted by the poet's own hand.

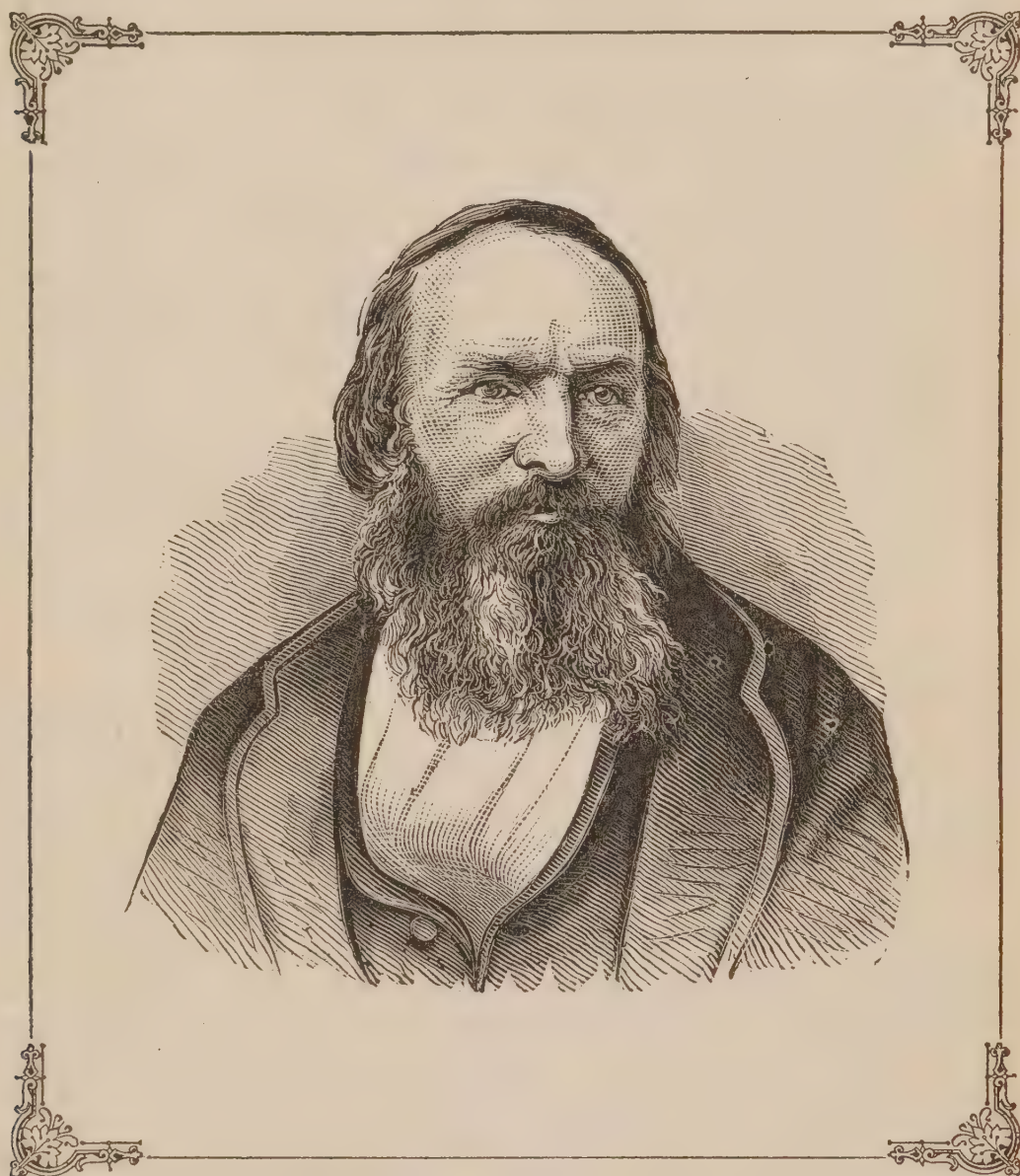
The introduction of the mulberry into France for the food of silk-worms was bitterly opposed by the people, and only effected by the will of Henri IV., who foresaw the vast wealth to be thus gained. There is a pretty Oriental proverb inculcating patience and hope, which says, "With time and patience each leaf of the mulberry becomes the softest silk."

And the Lord God planted the trees of the field—"every tree that is pleasant to the sight and good for food; the tree of life also in the midst of the garden, and the tree of knowledge of good and evil," under the shadow of which Eve and Lucifer had that agreeable little intercourse from which came all this trouble and confusion!

THE FOUNDATION.—This from Edward Everett:—To read the English language well, to write with dispatch a neat, legible hand and

be master of the first four rules of arithmetic, so as to dispose of at once, with accuracy, every question of figures which comes up in practice—I call this a good education. And if you add the ability to write pure grammatical English, I regard it as an excellent education. These

are the tools. You can do much with them, but you're helpless without them. They are the foundation; and unless you begin with these all your flashy attainments, a little geology, and all other ologies and osophies, are ostentatious rubbish.



SAMUEL BICKLEY, JR.

A STRONG face, the organization in general of a "self-made," individual man. He bears the stamp of the western man whose row has been hoed amid asperities, which have not been conquered without leaving something of an impress of their nature upon his character. He is a strong, enduring, energetic man, with enough of aspiration and decision, as witnessed by the high crown, to furnish a high motive for effort. His full side-head indicates mechanical ability of a superior order, and a fondness for the esthetic in physical life. He has that sort of ready

contrivance or capacity which enables him to meet contingencies. His planning talent associated with his large perceptive enables him to adapt his acquirements of information to purposes of utility, and gives him a natural disposition to scientific matters. He believes in economy and prudence, in turning things to good account. With such a head he ought to be an inventor of valuable apparatus or implements, or a civil engineer. Educated, he would show superior ability as a teacher or physician.

Samuel Bickley, Jr., was born on the 13th

of November, 1810, in Middlesex, England. In 1836 he and his father, who is now one hundred and two years of age, and still hale and hearty, emigrated to this country and settled on a piece of land in the heart of a wilderness, which was for a long time designated by the euphonious title of "the Bickley swamp-hole." But indomitable pluck and energy triumphed, and in this wilderness and out of it has arisen one of the finest farms in Genesee County. The farm is a perfect paradise of fruits, flowers, and vegetables, and teeming crops, and boasts of buildings enough to make a small village.

Besides being a scientific farmer, Mr. Bickley has been a successful lecturer on Phrenology and kindred subjects for over a quarter of a century, and he has won no little celebrity in the region of his residence for his knowledge of science. Besides his labors as a farmer and as a lecturer, he has contributed much to the local press. As a delineator of character he is clear, explicit, and faithful, having, it is claimed, no superiors in his State.

Mr. Bickley never received the advantages of a school education, even in the most limited sense of the term, and hence is altogether self-instructed. He is a man of strong convictions, addicted to none of the common social vices, and is a strong advocate of temperance in all its forms.

His style as a lecturer and writer may be inferred from the following extract from an article recently published in the *Wolverine Citizen*:

"A great lamentation of how men have fallen in morals is an every-day occurrence. I consider man is now as good and a little better than he ever was before in intellect and moral conditions. That all men have plenty of animal brains we will admit, but not near as much nor are they as active as they used to be in our forefathers. That intellect and morals are gaining and ascending all must admit. It is no criterion because some of our men in high station have shown a breach of trust. We know how they get into office; most of them by sharpness in trade, and when they got this wealth it was easy to buy up the votes of the dishonest, and gull the fools. When a man gets wealth and puts on a good appearance, we are fool-

ish enough to think he is a respectable man. Property covers a multitude of sins, but where, on the other hand, is a man every way worthy for the highest public trust, but, forsooth, has not grabbed a very big share of this world's goods; you do not shower fat offices on him; no, he is not thought *respectable* enough. Verily we are a curious race. Men that we know to be dishonest all their lifetime, that have been directly and indirectly stealing from their fellow-men, we put into places where they can carry it on on a grander scale; and when it turns out that they have been practicing in their old line, we make a great to-do and lament on the fall of man. * * * Such men luxuriate and give full play to their animal faculties, supposing that wealth is going to do everything for them; but in the latter part of their lives they find out a great mistake. They find out that property, if it is not used for a good purpose, is nothing more than a bubble; prick it, and it bursts, and carries them as victims into general destruction."

TRAITS OF CHARACTER.

THE calling in which man is trained necessarily exercises a considerable influence in the development of his character. It affects his gait, his manner, and his speech, as well as his mental and moral characteristics.

It is impossible to mistake the military man. He is an illustration of the power of discipline. The new recruit—the clod-hopper from the plough—is soon "jicked" into shape—becomes a smart, well-set-up fellow, and never afterward relapses into the lout.

How different is the sailor! He rolls about on his sea legs—his feet always seem as if they were grasping for a footing. His manner is free and easy, with nothing of the precision and formality of the military man. His feelings, manners and ideas are of a piece with his outer man. There is no mistaking Jack Tar for Corporal Trim.

It is the same with other trades and professions. Take a lawyer, for instance. Habit and discipline have made him precise and systematic in the transaction of business. He is a martinet in all things. His mind is made up of pigeon-holes, in which his facts and ideas are filed and docketed in regular alphabetical order. He is a red-tapist even at heart. He keeps

old letters and lays them up as evidence. His whole character becomes fixed and determined by his profession. There is no mistaking the lawyer.

The divine is the very opposite. He has no knowledge whatever of business or ruinous habits. He is the most innocent of mortals. Of all professional men, he knows the least of practical life. He is always making blunders if he meddles with business. His business is speech. He is a student, a reader of books, a writer of sermons. And students are generally men of little practical wisdom. A man who is great in the dead languages is rarely great at anything else. He may know all about Greece and Rome, but next to nothing about his own age and country. He may even be ignorant of its literature. Hugh Miller says, in his autobiography, that "all the great readers of my acquaintance—the men most extensively acquainted with English literature—were not the men who had received the classical education. In that common sense which reasons but does

not argue, and which enables men to pick their stepping prudently through the journey of life, I found that classical education gave no superiority whatever; nor did it appear to form so fitting an introduction to the realities of business as that course of dealing with things tangible and actual in which the working man has to exercise his faculties, and from which he derives his experience."

The medical man, again, is something quite different from either the lawyer or the divine. He is very much of a "lady's man." He possesses no marked individuality of character. By habituating himself to humor the foibles of people of all kinds, he merges his own individuality, but becomes a very accommodating, agreeable, chatty, gossiping, kindly person. His success in business depends mainly on this, and so his character is influenced and formed. Such men as Abernethy, who preserve their strong individuality throughout their professional career, are the exceptions which go to prove the rule.

PRE-ADAMITE MAN NOT IN THE BIBLE.

THE origin of man is usually made a purely scientific inquiry; but there have been some discussions of this subject from a Bible standpoint. One of these appeared something more than a year ago in the PHRENOLOGICAL JOURNAL, and I then promised myself to prepare a reply to that document if there was no answer from any one else. I have seen none that I regard as conclusive, and I shall, even at this late hour, submit a few thoughts on the subject.

Other writers besides the one I have just mentioned maintain that the Mosaic narrative gives clear indications of the existence of pre-Adamite races. But the passages to which they refer when impartially examined will hardly bear such an interpretation. These men have doubtless been led to discover such indication as a means of avoiding the (to them) unpalatable conclusion that the diverse races now on the earth have a common origin. Now, I submit that whether they have such an origin or not, a fair investigation of Bible truth reveals nothing to the contrary.

Let us examine some of the passages on which our authors rely. As a first example take Gen. x., 5: "By these were the isles of

the Gentiles divided in their lands." The sons of Japheth are meant. It is claimed from this that the isles were already settled, and, of course, by another race, when Noah and his sons came forth from their wondrous voyage. This is to assume that the deluge was limited, a mooted point, and yet that it destroyed all of Adam's posterity, else these islanders might have been of the same stock as Noah. But without discussing the extent of the deluge for the present, or the difficulty in which these writers involve themselves, let us inquire into the time at which this record was made. According to the accepted Bible chronology, Moses wrote about 800 years after the Flood. This period could not have been less, though it might have been indefinitely greater, but whether greater or not, the fact remains that Moses spoke of these isles, not as they were called when Japheth's sons settled them, but as they were known when he wrote. This is in perfect harmony with the Mosaic style. In his description of Eden he does not mention the five rivers by the names Adam gave them, or indicate that Adam had any names for them at all; but he mentions them by the names they bore in his own day. He did this that

he might be understood by his contemporaries. There was no memory of Edenic days among his people, and if he had spoken of those early times in terms they could not comprehend, he would have been under the necessity of an explanation, which was avoided by using names with which they were familiar. These islands were called the "Isles of the Gentiles" because they were settled by Japheth's posterity, not before. An example of the same kind is found in the land of Cain's exile. It was called the "land of Nod," or, "the land of the wanderer," not before he dwelt there, but because he did wander to that place. The most, then, that can be got out of that passage is simply this: these grandsons of Noah settled certain islands that were known in Moses' time as the "isles of the Gentiles." In our own histories we constantly use such language. Thus, we say that South Carolina was settled by a party of French Huguenots in 1562. We do not mean that it was South Carolina when they colonized it, but that it is now called by that name. We must speak in this way to avoid undue prolixity in historical accounts. Moses always did this, and if afterward a name used by him became obsolete, subsequent expounders of the law introduced the modern name. (See Gen. xxiii. 2.)

We are also referred to passages in the prophets, where are mentioned nations that were strange to Israel. One of the strongest of these, and a type of all the rest, is Jer. v. 15: "Lo! I will bring a nation upon you from afar, O house of Israel, saith the Lord; it is a mighty nation and an ancient nation, a nation whose language thou understandest not, neither knowest what they say." Now, candidly, if there is any indication of a pre-Adamite man here, I confess I am unable to see it. Suppose there was a nation with which Israel was unacquainted, is it any more than we should expect when we consider the limited means of communication in that age and between neighboring kingdoms? This is but natural among people of Israel's habits; and had other nations been as much confined to locality in their wars and conquests as were the Jews, they would have been in the profoundest ignorance of distant countries. We must remember that Israel was but a small part of the Shemitic family,

and besides the numerous other tribes of this stock, there remained all the Japhetic and Hamitic families to wander away and become strangers to the little tribe of Jacob. There is nothing more natural than this. The distant settlements of these kindred peoples, and their constant migrations as their increased numbers demanded it, would be lost sight of by the bondsmen of the Pharaohs, and when their restless and energetic spirit had developed them into great nations, they might easily return to their Jewish cousins, strangers and speaking a strange tongue. But while this is true, and affords a sufficient explanation of the prophetic references, the word *strange* is in most instances not used in this sense. It simply means foreign, and a stranger, a foreigner, or an exile. This is the obvious meaning in the many references to "strange women" and "strange wives."

Again, we are assured that Cain's wife was a pre-Adamite, for he obtained her in "the land of Nod." That, indeed, is a revelation. The text does not affirm that he obtained her there. A careful reading will convince any one of that. I have already indicated that "the land of Nod" was not so called *before*, but *because* Cain settled there. The name itself points to this conclusion, and such, I believe, is generally admitted to be the meaning of the passage. The most obvious understanding of the account is that he took his wife with him into exile, or rather that she, woman-like, followed him in his hard punishment, remembering the fiat of Jehovah, "They shall be one flesh." It can not be denied that she is introduced to us rather abruptly, and, perhaps, a little unexpectedly, and we naturally feel some curiosity about her origin, and would like to know if Cain married into a respectable family. But we look in vain, as far as the Bible account is concerned, for any other father and mother for her than Adam and Eve. Surely she could have no more honorable parentage. Then, let no one be horrified if I should say she was most likely Cain's own sister. There is nothing unreasonable in this, or inconsistent with the history. Of course, what necessity then justified we now rightly condemn. We would expect that such a custom as the inter-marriage of the closely-related would

die out slowly, even after the cause of it had disappeared. This is precisely what did occur, certainly in Jewish history, very probably among other nations. Even good father Abraham married his half-sister, and prince Amnon, royal David's son, loved his beautiful sister, and she was of opinion that the king would consent to their marriage. Thus we see how long the early customs of men lingered even among the people under God's special care and instruction. Men may account for this in any manner they please, I only mention the fact and its bearing on the shadowy history of Cain's wife, to show that there is not the slightest necessity for supposing her to be of pre-Adamite parentage.

High authority in the scientific world assumes the discovery of two distinct races in the "sons of God" and the "daughters of men" of Gen. vi. 2, the former being the descendants of pre-existing idolatrous races, and the latter the posterity of Adam. It is held that on any other supposition the passage is wholly unintelligible. While I have the highest respect for the gentlemen maintaining this view, I am compelled to say, upon a careful examination of the text, that they have entirely mistaken its meaning. In the first place, the two expressions used do not indicate a distinction of races, but of character. The "sons of God" are not the "servants of the gods," or the "idolatrous races," but the worshipers of the true God. That this is the real meaning of the expression is rendered almost certain from Gen. iv. 26, where Seth's family is mentioned, and it is added, "then began men to call upon the name of the Lord," or, as the marginal reading has it, and which is most likely correct, "Then began men to call themselves *by the name of the Lord*." Here we have an explanation as to who were the "sons of God," and why they were so called. The "daughters of men," while they certainly are the "daughters of the Adamite," are likewise the descendants of wicked men who would not honor themselves by wearing the name of the Lord. There is no difficulty at all that need drive men into denying the unity of the race. The short notice of Cain's family shows how one sin begets another, and how easily thus early in the history of the world there could be the distinction I have pointed out. With

this understanding the "unintelligible" passage becomes perfectly plain, and consistent with the Adamic origin of the races, and the formidable difficulty vanishes like a mist before the sun.

As the Bible gives a succinct and exhaustive account of the creation, the most sensible search for pre-Adamite man is the part of the Mosaic narrative containing that account. If he is not found there, it is more than probable that all further search for him will be in vain. But we are confidently told that he is among the "living creatures" of Gen. i. 24, and many other passages are brought as corroboration of this conclusion. What, then, does the expression "living creatures" mean? It is to be noticed that after every command of God bringing a thing into existence, follows a brief description of its creation. Thus, verse 25 gives the result of the command in verse 24, showing that "living creature" was a general term, including the "beast of the field," etc., which were mere specifications under it. This appears from the construction of the language, and is rendered still more certain from ch. ii. 19: "And out of the ground the Lord God formed every beast of the field and every fowl of the air; and brought them unto Adam to see what he would call them; and whatsoever Adam called *every living creature*, that was the name thereof." There can be no doubt in this case that "living creature" is a general term, including all the animals made to pass before Adam. And there can be as little doubt that it has the same meaning in ch. i. 24, as explained by verse 25.

But is there in the Bible no positive proof of the unity of the race? All the passages thus far examined give negative evidence on that point; but is there no direct affirmation of that unity? Yes; we find it in Paul's speech in "the city of the gods." He there expressly declares that God "hath made of one blood all nations of men to dwell on the face of the earth" (Acts xvii. 26). We learn from this that men, at least, have a common nature, and, for aught that is taught to the contrary in the Scriptures, that they have a common parentage. It has been truly said that if it could be shown from a scientific standpoint that the races were derived from two more original pairs, this passage could

be harmonized with that conclusion. But if science fails to do that, the passage remains a categorical statement of the common origin of the races. There are one or two other passages that could not be thus easily reconciled with the diverse origin of man. "For as in Adam all die, even so in Christ shall all be made alive." (1 Cor. xv. 23.) "For as by one man's disobedience *the many* were made sinners, so by the obedience of one shall *the many* be made righteous." (Rom. v. 19.) It is clear that all who are contemplated in the redemptive act of Christ were affected by the fall of Adam. In whatever sense they fell, this was what made their redemption necessary. These passages presuppose that there are no other nations on the earth except the descendants of Adam, and clearly imply that there is no provision made for any other. And there is also the necessary implication that Bible writers at least believed and taught the unity of mankind. This doctrine, indeed, is deeply interwoven with the whole system of Christianity, and to reject it would be to involve ourselves in difficulties greater than we have ever yet grappled with or than we could hope to remove.

It would appear from this cursory view of the matter that from a Bible standpoint, at least, the unity of mankind is established. All indications in the Sacred Word of a pre-Adamite man are fancied rather than real, and grow out of the difficulty, in the minds of many, of reconciling known facts with revealed truth. They see about them strongly marked varieties of men, and, being unable to conceive how all these could have sprung from common stock, they seek a solution of the problem in the pre-Adamic theory. And, furthermore, being unwilling to yield up their faith, they endeavor to find a recognition of that theory in the Scriptures. All this is unnecessary. There is no need of goading one's self with an imaginary trouble, and this is precisely what too many persons do in their dealings with primeval man. They endeavor to force the facts in the world's history into too small a compass of years, and facts are stubborn things. They will not suffer compression one iota beyond their monial space. An occurrence that should occupy twenty years can not be made to take place in one. Just so with the diver-

sities among men. We have only to allow time enough to account for them all. If there are differences in mind, color, or external configuration, that have neither increased nor diminished in any noticeable degree in historic days, we have only to assign a sufficient period of time for their accomplishment, and the difficulty is removed. We know that there are changes constantly going on in infinite variety, which are effected by time and outward circumstances, and reasoning from analogy, there is nothing in the way of our supposing that the same causes might work still greater and the greatest results if the period were sufficiently extended. There is nothing in Sacred History that precludes our allowing to man a much greater antiquity than it has been customary to assign him. While we may not be able to express his years in time absolute, we are justified in assuming a sufficient number to harmonize all known truths relative to his origin. When I say truths I do not mean mere theories and opinions, but facts that have taken their immutable stand in the galaxy of learning. It is only such as these that are worthy to assume a place among the immortal harmonies of truth, that have the right seriously to demand of us a reconsideration of our views, or power to cause us one moment's anxiety as to our convictions. If we see in the present conditions of men certain things, the manner of whose accomplishment we can not comprehend, let us do violence to no established truth to explain them. I would not displace a single star in the heavens that I might see further out into the misty space it screens. If God hides for the time the infinite behind the jeweled curtain of night, I am content to bide my time and see further when I rise higher. If revealed truth rises before me so grandly that it shuts out what lies beyond like a lofty range of mountains, I would not crush it, but climb to such a height that I may overlook it, and gaze on the beauties of the other side. This is the true course. Never put your foot on a truth because it is in your way, or seems out of place. Just search out and throw others alongside of it, and, like the little crystals in the sunlight, you will see them assuming beautiful shapes of the most perfect harmony. This is just as true of primeval man as of the story of redemption. In this inquiry, as in every other, the highest harmony is the highest truth.

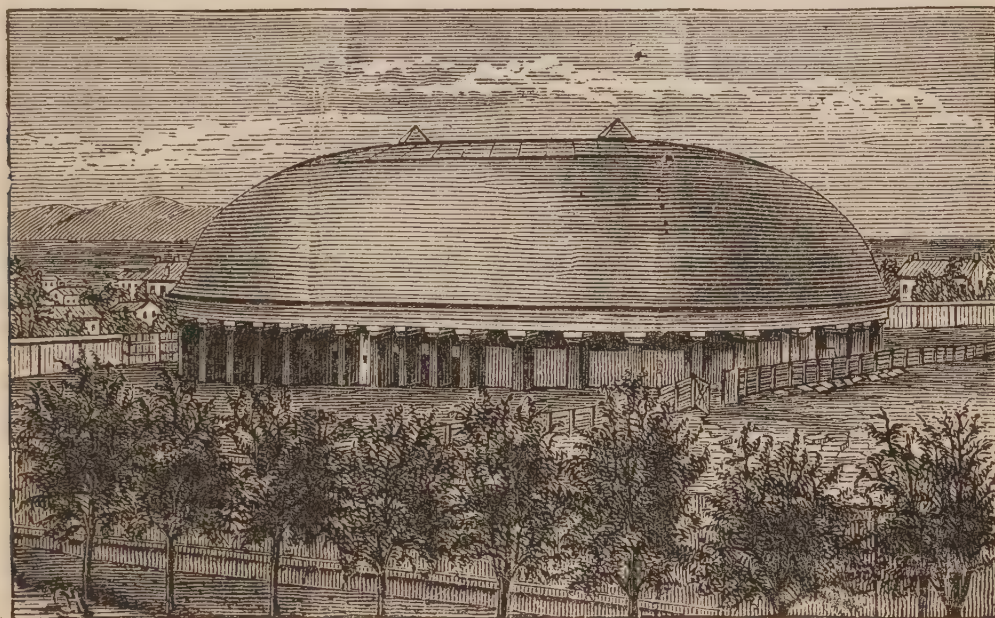
ORLANDO.

THE MORMON TABERNACLE.

UNUSUAL or singular religious sentiment, like other peculiar mental qualities, has expression in unusual or singular physical forms. Hence that great building, the Mormon Tabernacle, in its unique architectural features, impresses the visitor with the extraordinary character of the faith of the people whose zeal created Salt Lake City. The temple is yet unfinished, but when it is the Tabernacle will remain the place where public worship is celebrated, as was originally designed. The location of these edifices,

other members of the priesthood. Behind the seats of the authorities is the grand organ, considered the third largest in point of size in the country, but the largest ever made in the United States. It was constructed by Mormon artisans, of materials, excepting the metal pipes, obtained in the Territory.

The Tabernacle is well represented in the engraving, so that the reader can perceive the oddity of the design. It is staunchly put together, there being no fears entertained of a Syracusan calamity when occupied by



so dear to the heart of the faithful, was indicated, it is claimed, by an angel whom Brigham Young saw in a vision.

The Tabernacle is probably the largest building used for public meetings in the world that has a roof of a single span, unsupported by pillar or column. Its length is two hundred and fifty feet, with a breadth of one hundred and fifty. Forty-six pillars of red sandstone, nine feet deep by three feet wide, support the vast network of timbers which form the roof. The ceiling is sixty-two feet from the floor, and is perforated with holes, neatly stuccoed, which serve the purpose of ventilation and provide the means by which a scaffolding may be slung up when repairs are deemed necessary. At the west end is a platform with three seats in the center in front, one elevated a little above the others. These seats are occupied by the church dignitaries during the meetings, while the space on both sides is devoted to the

one of the vast assemblages which a religious festival or important state event calls together.

MUSIC.

SWEET music, I love thee! It is thy gentle power
The spirit to cheer in the grief-stricken hour;
To soothe its deep sorrow 'till o'er it there steals
A rapture akin to that Seraphim feels.

Sweet music, I love thee! It is thine to impart
Blest balm to the wounded and bleeding in heart—
To lift the sad soul 'bove the gloom of despair,
And chase from the brow the deep furrows of care.

Oh, come, sweet enchanter, at twilight's soft hour.
When the air is perfumed with the sweet-scented
flower— [are near,

When the pale moon is beaming, and loved ones
Entrancingly sweet are thy strains to my ear.

And come with thy melody, soothing and soft,
When my spirit is struggling to soar far aloft—
Where anthems of rapture, more blissful and
sweet,

The purified spirit in Heaven shall greet.

MAGGIE A. JENNINGS.

TEMPERANCE SECURED BY EDUCATION.

EDITOR PHRENOLOGICAL JOURNAL:

IN your issue of the JOURNAL for September is an article under the title of "Resolution and Appetite," in which the writer relates his experience in having signed the temperance pledge while young, and adhering to it through life. In the same article is also advocated the practice of circulating the pledge in Sunday-schools, the common day-schools, and in other places where opportunities present themselves.

Now, this is all very good, and would probably be of considerable efficacy in checking the great tide of intemperance, which covers our land with such baneful results; yet is this getting at the root of the disorder? Is it striking the enemy in his most vital point? Here in the State of Minnesota temperance meetings are held in which the enthusiasm is no less than that which we have often observed at an old-fashioned Methodist camp-meeting; and though the temporary excitement which they occasion may check their progress for an instant, drunkenness and rioting survive. Good Templars' organizations meet and form resolutions, and though their influence may be of some benefit, drunken men walk our streets daily.

I am of the opinion that before we can produce any permanent effect upon this great evil we shall be compelled to treat it more scientifically. In at least two-thirds of the cases drunkenness is a disease, either physical or mental. When physical, it is located in the stomach or nervous system (though the entire organism may be affected by it), and is acquired either by inheritance or a perverted manner of living. When mental, it is located in the brain, and is often inherited in this way, though it may be caused by a perversion of the faculty of Imitation, or some other faculty. Some people claim that such things are never inherited; but any individual of correct observing disposition knows better.

The question now arises, How are we to cure this disease? Is signing the temperance pledge the most feasible plan? If I were to be attacked with inflammation of the lungs, do you think that any resolution that I might make would go far toward curing me? I

might resolve to keep up a flow of animal spirits, which would sustain me in enduring the disease, but that would produce no direct curative effect. The drunkard may resolve to avoid the place where liquor is sold, which resolve would aid in prevention, but do little toward performing a direct cure. Then how is the difficulty to be treated?

The rule of cause and effect holds good here as well as anywhere, and the treatment is very simple, though it may require some dexterity to apply it.

The essence of our treatment is concentrated in the one word *educate*. First, make people know where the difficulty is, and what its nature. Secondly, create within them a desire to be cured. Third, show them the means of cure, and how to apply it.

In order to fulfill the first indication of treatment, teach people structure and function—in other words, teach them anatomy and physiology (Phrenology being a part of physiology), and teach them how they abuse their bodies.

Physicians all know that the greater percentage of cross tempers, sick headaches, and the like, come from an abuse of the digestive power.

To fulfill the second, cultivate within them a more refined state of feeling; show them a difference between the gross man and the man of culture, animate them with a hope of a better life hereafter, and stimulate them with a desire to attain to that life by a purer every-day life. We may accomplish the third partly in the accomplishment of the first, and partly by teaching them hygienic laws.

Teach parents that their child's character is being formed even before it is in a state of inchoation. Give them to know that Phrenology is a reality, and that its laws are as infallible as those which govern the solar system, or those which control the growth and maturity of vegetation. Teach them to have respect for their bodies, for without a clean, healthy body a person can not have a clean, healthy soul. Inspire within them that high regard for home and the domestic circle which will stimulate them to make that home, as it should be, a heaven.

When we have accomplished all of this, intemperance will have ceased, and we shall be a better, happier, and more nearly perfect people; and liberty of a genuine nature will pervade our land.

THEO. L. HATCH, M.D.

BLOOMING PRAIRIE, MINN.

PHRENOLOGY IN SCOTLAND.

[We have received from a friend at Dundee the following historical sketch, which may interest some readers. We hope to hear further from our friend and phrenological coadjutor, Mr. SMITH.]

GEORGE COMBE introduced this noble science into Scotland, or rather welcomed it out of the hands of Dr. Spurzheim in 1816. It was much ridiculed at first, even by Combe, and railery in prose and verse did its best to crush out the truth, but, as usual, without effect. Investigation soon proved to Combe's mind that the science was based on facts, and he ultimately published many very useful and learned works on Phrenology and kindred studies. He also lectured in many of the principal cities of Scotland and England, also in America and Germany. His books on the science have been deposited in the Advocates' Library in Edinburgh.

A phrenological society was formed in his time in Edinburgh, also a very good museum was commenced, which is now under the charge of trustees, and contains several hundred very valuable crania, besides busts, drawings, and a library. Monthly meetings are held by the members in the museum, lectures delivered, and papers read; and in the archives the pictures with which Mr. Combe used to illustrate his lectures long ago are preserved. There is a printed "address" to the Society, written by Mr. C., which is usually presented to new members, and is very useful to beginners. This pamphlet contains advice as to how to get along in studying the science; it would be well to have it generally circulated.

In Combe's day many societies were organized throughout the country, but the Edinburgh Society is, I believe, the only one which has survived.

A lady lecturer named Mrs. Hamilton kept the science before the public for many years; she was lately presented with a testimonial by the friends of Phrenology in Edinburgh on the occasion of her retiring into private life.

In Edinburgh University Dr. Laycock is a lecturer and writer on Phrenology.

In Aberdeen, Mr. Bain, professor in the university, is a very talented writer on Phrenology and the study of character.

Mr. Jackson, the well-known ethnologist of Glasgow, lately deceased, did good service to Phrenology in lecturing and writing for many years on it and kindred studies. He was a man of talent, member of several learned societies, and a powerful speaker.

Rev. Peter Melville, M.A., Glasgow, is a very talented and clever phrenologist, and delights to give examinations, in whatever company he mingles. He is teacher and lecturer in the School of Art, Glasgow, and explains the principles of the science on all suitable occasions.

Messrs. Fowler and Wells* lectured through Great Britain and Ireland years ago, and took us all by surprise on account of the powerful, useful and elevating character of their expositions. Crowds flocked to their meetings night after night for weeks, while a very great number took advantage of their very accurate and honest private delineations. The writer will never forget these interesting meetings and noble lecturers. With the former, his correspondence ended lately, having induced him and his talented lady to visit bonnie Dundee once more, where he found a very friendly reception and most cordial treatment from phrenologists, and all classes in the community. With the latter, a friendly intercourse is still maintained. Well does the writer remember being invited to London to have sittings over knotty points of the science, with his kind friend, Mr. S. R. Wells. It was a proud day in his life when he got a certificate, and started home again; it made him redouble his exertion in the study of the science with a view to qualifying himself in every available way for taking the field, other than the amateur, should circumstances so order.

Mr. Wells is entitled also to many thanks for receiving introduction letters from my hands in behalf of Scotchmen who go to seek their fortune in America, and for assisting them to procure situations.

There are practical phrenologists in England and Ireland, but none that I know who have settled in Scotland. I am delighted to see the New York Institution turning out so many earnest men who are to lecture and examine.

I think there is a very good field in Scotland for several of them, and a very good field also in England. Let some really talented and good men try our country, and I am certain

* L. N. F. and S. R. W.

they would succeed. Let them make Phrenology to be admired as a truth of God, a handmaid of religion, and a lever to elevate mankind—such men are bound to succeed. Why should they not succeed?

We have a few opponents of the science, men of standing in the world of letters, but in gen-

eral Phrenology is admitted as a fact, and that it merely rests with the demonstrator to bring out clearly and correctly its usefulness and beauty. New discoveries will constantly be made in its wide and useful field. Let all lovers of the truth in nature and revelation admire, study, and apply its teachings.

FLORIDA.

[To the question, "Where shall I winter?" the poet answers in these pretty verses. Florida is becoming almost as much of a winter's resort as the New England White Mountains are in summer. Southern Colorado, New Mexico, Texas, and Southern California will divide with Florida the charms of a winter's residence.]

'Tis an Eden-like land rises now in my dreams,
Sight-entrancing, and fair, gilded o'er with sun-
beams;
And her great tropic heart, to the North open wide,
Warmly says: "Here is life where my blue rivers
glide.
See them winding and flowing into soft gleaming
lines,
Rounding sweet groves of orange and whispering
pines;
Through our dreamy thin azure *your* home breezes
blow,
Beating vigor and strength from your regions of
snow;
And the winds of the East, from their gay wanton
wings,
Drop the bright silver dew that the great ocean
flings.
In our forests of green nature joyously reigns,
Filling full with rich, strong life her flowery do-
mains; [air,
Here the bird's wing melodiously breaks the soft
In low murmuring sound wind the gay streams so
fair;

And the honey-bee sings a sweet song in the rose,
Which in wildest profusion and richness here
grows;
While the step of the deer, as it rustles near by,
Startling pheasants and quails from their coverts
anigh;
With the swoop of the eagle, the song of the dove,
Each and all make a melody sweet as first love;
And old, deep-hearted silence, with listening ear,
Seemed breathless with rapture this chorus to hear.
On our future's no shade; promise lies in our soil;
Near its heart sleep the germs of wine, bread, cloth,
and oil;
The magnolia, date, olive, and lemon entwine;
To the live oak and cypress clings close the fond
vine,
While the palmetto jungles, historic in name,
Offer pathways by labor to riches and fame.
There is life in the air, there is youth in the stream;
In the sky's tender blue, in the sun's golden beam;
And far better than wine, the rich perfumes so
near,
For the bloom of a summer unfading is here."

MATTIE A. BRIDGE.

A SOUTHERN GENTLEMAN'S ATTEMPT AT FARMING.

I MET my old friend Charles R— yesterday; "Joking Charlie" was his *soubriquet* in our school-boy days. He looked sadly changed in many respects, was badly dressed, not so healthy-looking; his complexion had a bilious tinge, the whites of his eyes were as yellow as his scented moustache, and he complained of rheumatism and nervousness. His boots were out of shape from long wear, and looked as if they hadn't had a good blacking in six months. His unmentionables were decidedly ungenteel, no less than two long rents in them, which had been carelessly mended by being "whipped" together. He was, however, still as *fat* as a penned-up, slop-fed hog, and, with all his ancient courtesy, offered us a

chew from his plug, and a drink from a bottle of "dead-shot" whisky. Charlie thinks that his failure to extend such courtesies (!) would be *prima facie* evidence of lack of validity in his title to the name of gentleman!

"You have not quit chewing or drinking, Charlie?"

"Well, no, not altogether, though I did leave off the use of tobacco for two months, but I found out it wouldn't do; I got up such an enormous appetite, and eat so much, I took dyspepsia, and I'm just obliged to have a stimulant in the morning now, can't stand the climate without one. Why, I feel like a dead man till I get my dram!"

Poor Charlie! I asked him how he had got

along farming since the war ended? The following was his experience:

"You know what prospects I had *before* freedom," he said; "as good a plantation as anybody, and as likely a parcel of negroes. I was never a hand to *drive*; I just let things knock along about as they would, and lived for enjoyment—fished, hunted, rode good horses, and let my negroes manage the farming themselves. I used sometimes to ride to the field when they were at work, but never staid long enough to lay aside my umbrella or take off my gloves. What with idling, stealing, and bad management they made enough corn to do them eight months out of the twelve, and I bought the remaining four months' supply on credit, never having any money in the spring, for what was realized from my cotton I spent on a grand splurge in the city at Christmas time. For the subsequent year's necessities I depended on my *credit*, which was india-rubber in those days. Any merchant would *trust* a man with such a body of negroes as I had. Ah, those were halcyon days, my friend! With their freedom my trouble began—and such trouble! No Zack to carry my gun when I went birding, or engaged in that exciting pastime, blowing out the brains of those saucy snakes, known as "black runners," or inflicting death in the eyes of those frogs that would persist in infesting my spring. I missed, too, sadly missed, the grinning ebony-skin that used to bob around at dreamy nightfall, softly chafing my burning feet, or running mesmeric fingers through my hair!

"Another prolific source of unhappiness arose. My cook, scarce second to Soyer, my *trained pastry* cook, took French leave, and I was reduced from a style of cuisine rivaling the St. Charles Hotel to the palate-trying condiments of a field-hand, who couldn't make a roll or cook a respectable beefsteak to save her life. It was more than I could bear. I groaned, I grieved, I appealed to my wife and daughters for aid, but found that they were completely absorbed, quite deaf to my complaints, in planning how to maintain their heretofore fashionable magnificence. My wife declared that with 'such a plantation' as I had, I ought to 'coin a mint of money a year farming with freedmen.' I made calculations on the base of her point of view, and found it would *pay* much better than working *slaves*, for, as that superior woman suggested, we wouldn't have any old, sick, worn-out negroes or little babies and children to provide for. Indeed, I concluded to make a very *big* thing of it, and even rented

some additional land, and all at once grew energetic in superintending repairs, fixing up both places, getting things in good running gear. I confess my unwonted spirit of enterprise somewhat effervesced with the June sunshine, and completely evaporated with the July heat. Happening to be located on the public road, my hirelings took occasion to stand gazing in gaping wonder at every passer-by, taking longer and longer rests as the season advanced, stopping at the end of every furrow to work on their plows, mend their gears, sharpen their hoes, or replenish their water-jugs. About the time my corn needed 'laying by' with a final clean plowing over, and my cotton required most attention, my main hands left, somebody else having offered them higher wages. I had to ride around and pick up such hands as I could get, vagabonds, refuse day-laborers, whose rule is only to work when out of meat, and then do as little as possible while they are at it. The cotton got choked with grass and weeds, dwindled and looked sickly. The corn silked and tasseled over small, badly-filled ears. I fretted myself into a fever, and had to be bolstered back to health on ice and lemons, bitters and beefsteak, which, with doctors' bills, increased the proportions of the debt that haunted me; for you know how it is, Joe, nobody can farm with freedmen and not make advances to them. They want dry-goods and they want groceries, and whisky they *must* have. It was hard to get the crop gathered, extra hands had to be employed and paid, and extra expenses were incurred; it was hard to make a satisfactory division of the spoils. At the end of the year I found myself poorer for the weight of an additional debt than at the beginning; so, at my wife's suggestion, I concluded to rent my land to freedmen, and have nothing to do with the business myself, except to exact a certain share of the profits.

"Left to themselves they did worse than ever, for you know the colored race have little judgment or persistency; the land, of course, was poorer cultivated and the crops small. In the fall the relations of my rentors and myriads of friends came to visit them, which, with sundry big meetings and 'freedmens' pic-nics,' led to exhaustive requisitions on roasting ears and life-preserving peas, not to speak of a suspicion of what had gone with numbers of our missing poultry. The corn-fields assumed a 'fodderacious' aspect, and I could hear of considerable quantities of seed-cotton being carried to a neighboring town and sold cheap, as such ill-gotten goods are generally sold. My share of

the corn was principally nubbins, and my few bales of cotton so light that some of my land went up, under the sheriff's hammer, to satisfy certain mortgages.

"On this serious contingency, I talked retrenchment, recommended it to my wife and daughters, descanted on the blessed principles of adaptation and wondered inwardly if there was any easy way to descend from our money-incurring heights; but I could hit upon nothing but a most humiliating tumble! The more I contemplated the exigencies of the situation, the more inevitable appeared said tumble. How should I accommodate myself and my interesting family to the changes wrought by the late fratricidal strife? Somebody said I ought to go to work myself, make my lady wife do our cooking, and set our daughters to teaching school! But, Joe, my whole nature revolts against such a procedure; plowing and hoeing are things I can not stand. Why, man, they give me the headache and backache awfully; our Southern suns are unendurable. As for my wife, she knows no more of culinary mysteries than the ex-Empress Eugenie; and I don't believe in my heart our girls could teach anything but music and dancing. I can't get them to do a thing. They won't go within a stone's throw of a cow, they are 'so afraid,' and it *spoils* their hands to wash dishes. But I'm looking out for a streak of good luck before long; my wife has a bachelor uncle, who went to Arkansas a score of years ago, and has made a fortune. We hear he is in a decline. Myself and eldest daughter are going to pay him a visit, and no doubt when he dies he'll leave us a good supply of the 'needful.' You know its a 'long lane that has no turning.'"

V. DU RANT COVINGTON.

WANTS THE STATISTICS.

I LOOKED over an article in the September number of the JOURNAL headed, "A Catechism on Money," and found much in it to admire; but there is one sentence in the article that I wish to have explained, that is this: "Statistics show the productive increase of our industries for a series of years to be 3½ per cent." I want you to accommodate me with the statistical report to that effect. I believe the percentage to be correct, but I want to be able to show it. I am a working farmer.

Ans. In response we quote from the speech of Hon. Alexander Campbell, of La Salle, Ill.,

delivered at Masonic Hall, Indianapolis, August 12th, 1874:

* * * I will here say that in this, and all other calculations, I have adopted the rule of adding the interest to the principal, annually, which is the natural law governing increase by percentage in all cases. * * * As agriculture is the leading interest and foundation of national wealth, the increase in it may be accepted as the index to the increase in all other departments of useful industry.

The following is an inventory of the farms and products of agriculture of the nation, as shown by the *census reports* for the three several decades ending respectively in the years 1850, 1860, and 1870.

1850.			
Number.	Items.	Value.	Total.
4,896,050	Horses and mules.	\$35 50-100	\$173,809,775
18,378,907	Neat Cattle.....	12 00	220,547,604
21,723,220	Sheep	1 31-100	28,457,368
30,354,213	Swine	4 00	121,416,853
100,485,994	Bushels Wheat....	1 00	100,485,994
606,259,917	" Corn & Rye	50	303,129,958
146,584,179	" Oats	33½	48,861,393
113,032,614	Acres imp'd land..	16 09	1,818,694,708
180,538,000	" Unimp'd " ..	8 04½	1,452,347,760
Total valuation in 1850.....			\$4,267,751,473
1860.			
Number.	Items.	Value.	Total.
7,400,322	Horses and Mules .	\$35 50-100	\$262,711,431
25,616,019	Neat Cattle.....	12 00	307,392,228
22,471,275	Sheep	1 31-100	29,437,370
33,512,867	Swine	4 00	134,051,463
173,104,924	Bushels Wheat....	1 00	173,104,924
859,894,120	" Corn & Rye	50	429,947,060
172,643,185	" Oats	33½	57,881,062
163,110,720	Acres Imp'd Land.	16 09	2,624,451,495
144,101,818	" Unimp'd " ..	8 04½	1,963,800,126
Total valuation in 1860.....			\$6,002,777,154
Deduct valuation in 1850.....			4,267,751,473
Total increase in value of lands and products during the decade ending in 1860 being 41 per cent. in ten years, or 3½ per cent. per annum			\$1,775,025,681
1870.			
Number.	Items.	Value.	Total.
8,270,785	Horses and Mules..	\$35 50-100	\$292,611,868
23,820,608	Neat Cattle.....	12 00	285,847,296
28,477,951	Sheep.....	1 31-100	37,406,116
25,134,569	Swine	4 00	100,358,276
287,745,626	Bushels Wheat....	1 00	287,745,626
777,863,344	" Corn & Rye	50	388,931,672
282,107,157	" Oats	33½	94,035,719
188,921,099	Acres Imp'd Land.	16 09	3,039,740,433
218,813,942	" Unimp'd " ..	8 04½	1,760,358,163
Total valuation in 1870.....			\$6,288,115,219
Deduct valuation for 1860.....			6,002,777,154
Total increase in value of lands and products during the decade ending in 1870 being 4.4 per cent. in the ten years, or 37-100 of one per cent. per annum, compounded annually.			\$265,338,065

The increase during the twenty years from 1850 to 1870 was 45.4 per cent., or one and nine-tenths per cent. per annum. Of course the extremely small increase during the decade

ending in 1870 was owing, mainly, to the large number of men withdrawn from agricultural pursuits to fill the ranks of the army, but as the increase during the decade ending in 1860 was greater than during any like period in our previous history, I think it quite safe to assume that three per cent. is a full average rate. * * * I will say that I have noticed a statement in a recent speech by Hon. W. D. Kelley, of Pennsylvania, in referring to the rapid growth of wealth in that State. He says: "The estimated value of all the property, real and personal, in the State in 1790, or eighty-four years ago, was but \$432,000,000, and at the present time it was \$6,400,000,000." Now, in order to ascertain the *rate* of increase, we have only to apply the simple rules of arithmetic. \$432,000,000 at $3\frac{1}{2}$ per cent. per annum for eighty-four years, will amount to \$6,787,000,000, or 387,000,000 more than the present value of the property in the State. It will thus

be seen that the rate of increase was but little, if any, over three per cent. per annum. And let me call your attention to the fact that, although a rich agricultural State, it has also a large manufacturing interest; so that it would seem that where these interests are combined the rate of increase is not greater than I have stated it.

Although the statement of Judge Kelley shows that the entire increase of property in Pennsylvania, productive and otherwise, only shows $3\frac{1}{2}$ per cent., we should incline to the opinion that manufactures would show a larger *apparent* gain.

We say *apparent*, as they, unlike agriculture, are protected by tariff, so that when they gain a dollar by actual production, the consumer pays another dollar for their "protection"—in exact analogy to our experience when a boy, our father *paying* us fifty cents to saw a cord of wood, and *giving* us another fifty cents to encourage our industry.

PRISMATIC COLORS.

MATTER is the word used to symbolize in consciousness all *things* which may produce conscious impressions. There is abundant reason, drawn from anatomical and physiological considerations, to conclude that the brain is the organ in which material impressions become conscious sensations, and that the nervous system is in every case of conscious sensation the medium through which a material impression is transmitted to the sensitive brain. Moreover we know that, in general, impressions are made upon the sensitive brain only by matter when in the *condition* of motion. Hence, the essential pre-requisites of conscious existence are a sensitive brain and external material motion. It follows that all we know of matter is the sensation resulting from its motion; and hence when the motion of matter relative to the position of any sensitive brain ceases, that matter ceases to have any existence in consciousness to that brain, and may be considered as annihilated.

Vision is a special material impression made upon an organ called the eye by the motions of a material called the *luminiferous ether*, and transmitted to the sensitive brain by the optic nerve. The sensation produced by vision we call light.

From a comparison of the laws that pertain to the sensation of light with those of sound, we infer that the sensation we call light results from ethereal waves which are analogous to the atmospheric waves which produce the sensation of sound. And when, by interposing a prism, we distribute a wave over a greater surface, we might expect the character of the sensation to be changed; and if, instead of a wave of a definite length and intensity, the original wave should be broken by the prism into several waves of different lengths, each occupying a separate position in space, the sensation produced by the original wave might also be expected to be changed, and instead of being called white *light*, we might name the modified sensations red, orange, yellow, etc.

As the product of the wave-length into the number of waves in a given time is a constant quantity for the different colors, it follows that the prism has not arrested the wave motion, but has simply divided it; and that if we can again unite the motion, we shall restore the original sensation of white light. This the lens is found capable of doing.

When a ray of light is said to be *analyzed* or separated into the prismatic colors, we mean that the particular ethereal wave that

produces the sensation of white light has been broken into several different waves, which may again be united so as to form a wave that shall be identical with the original wave—"only this, and nothing more."

I do not propose here to criticise the article headed "Primary or Prismatic Colors," published in a former number of this JOURNAL, but I desire to quote a paragraph or two from that article, for the purpose of contrasting the views entertained by the author of that essay with what I conceive to be the more simple and rational hypothesis as presented above.

"The colors ascribed to the composition of white or solar light either exist or they do not exist. If the prismatic or primary colors exist, they must be material, as materiality is necessary to existence, * * * and if they do not exist they are immaterial, and so can not be analyzed, not being a part of anything; in either case the prism can not be an analyzer of light."

"In conclusion, it seems most probable that the so-called primary or prismatic colors are not the components or parts of solar or white light, but are simply the effects upon the eye of refracted or distorted light, and that the hues are varied or produced only by the angle of refraction; while solar light, heat, actinism and its life-promoting properties, are the actual incorporating effects upon all matter of a *material* called electricity."

The dilemma presented in the first quotation above is, I trust, satisfactorily answered in the preceding discussion.

The second quotation assumes that solar light, at least, is the effect of the union of all matter with a *material* called electricity, which is presented as the hypothesis of the author of the essay quoted.

J. E. HENDRICKS.

DES MOINES, IOWA.

POSTAL STATISTICS.

THE growth of our postal system is simply an index to the growth of other interests.

In 1790 the number of post-offices in the United States was 75, the length of post-roads in miles was 1,875 miles, the postal revenues amounted to \$37,935 and the expenditures to \$32,140. That was the day of small things in our postal system.

In 1800 the post-offices had risen to 903 in number and the length of post-roads to 20,817 miles. The revenues were \$280,804 and the expenditures \$231,904. This shows a remarkable increase in ten years.

In 1810 the number of post-offices was 2,300, the length of post-roads was 36,070 miles, the postal revenues were \$551,684 and the expenditures were \$495,969.

In 1820 the number of post-offices was 4,500, the length of post-roads was 72,492 miles, the postal revenues were \$1,111,927, and the expenditures were \$1,160,926.

In 1830 the number of post-offices was 8,450 the length of post-roads was 115,176 miles, the postal revenues \$1,919,300 and the expenditures were \$1,959,109.

In 1840 the number of post-offices was 13,486, the length of post-roads was 155,739 miles, the postal revenues were \$4,543,521.92, and the expenditures were \$4,718,325.64.

In 1850 the number of post-offices was 18,417, the length of post-roads was 178,672 miles, the postal revenues were \$5,499,986.86, and the expenditures were \$5,212,953.43.

In 1860 the number of post-offices was 28,498, the length of post-roads was 240,594 miles, the postal revenues were \$9,218,067.40, and the expenditures were \$14,874,772.89.

In 1870 the number of post-offices was 28,492, the length of post-roads was 231,232 miles, the postal revenues were \$19,772,220.65, and the expenditures were \$23,998,837.63.

In 1873 the number of post-offices was 33,244, the length of post-roads was 256,210 miles, the postal revenues were \$22,996,741.57, and the expenditures were \$29,084,945.67.

These figures give the progress by decades of the postal system of the United States since 1790, covering a period of eighty-three years. As it has been in the past, so it will be in the future; when we include all of Mexico, and the N. A. British Provinces, we shall have attained our majority. We are not yet twenty-one.

DROSS.—Reader, suppose we—each of us were put through the mental crucible and the dross taken out of us, how much would there be left? one has the dross of tobacco, another that of whiskey, another that of vanity, another preponderates in sensuality, another in a bad temper, another in selfishness. But it is possible, through the Christian religion, to so grow in grace as to eliminate the dross and to leave the pure metal.



NEW YORK,
NOVEMBER, 1874.

ONE NUMBER MORE

Completes Volume LIX. of the PHRENOLOGICAL JOURNAL and the year 1874! Then comes Volume LX. of the new year 1875. Are we ready for it? Can we say good-bye to the old without regrets, and welcome to the new? For ourselves, we accept the situation thankfully. We have tried to serve our readers faithfully in the past, and will continue to do our best in the near future. The cause we try to represent is the cause of the people. It is as much yours, dear reader, as it is ours. We would share our work, our cares, our profits and losses, and all the honors with all the lovers and supporters of the JOURNAL and Phrenology.

We are simply instruments through whom the cause is kept before the people and its principles are disseminated. It is our most anxious study to learn how we may serve our readers and the cause the most acceptably. We crave such words of advice, suggestion, and good counsel as many men of many minds may be able and willing to contribute for our own and for the public's good.

One number more! We are hastening on to the end! The buds of the tree which were formed this year will blossom and bring forth fruit next year. So our studies, our investigations, and our present experiences will find expression through the JOURNAL during the coming year. The prospects for an excellent future never looked brighter for Phrenology than at present. May all our readers share with us the promised harvest!

COST AND VALUE OF A MAN.

WHAT! is it proposed to estimate the supposed cost and commercial value of a man in dollars and cents? Are we to judge the cost or worth of men as we do of horses, cattle, and dogs? Is he to be bought or sold? Fear not; we shall have no more of that in this our

"Hail! Columbia, happy land."

Nevertheless, men and women have a com-

parative commercial or pecuniary value which may be estimated.

It costs something to raise a lamb, a calf, a colt, or a tree. We spend time, money, and care to bring them up to a condition of usefulness or commercial value. Is it less troublesome or costly to grow a man?

We say of a plant, a tree, or of an animal, *this* is useful, and of *that*, it is useless. So we say of men. One is worth much, another more, another is every way worthless, save as phosphatic matter with which to fertilize the earth. Estimating the value of horses and cattle when young, when partially grown, or when mature, is not difficult. We know just what they may have cost in money, in care, and in keeping, and we know about what they will bring. But how are we to arrive even at the approximate value or real worth of a human being at any stage of his existence? Let us see. *What has he cost?* The reader may cypher out this sum, so far as money expenditure is concerned, at his leisure. He may enumerate item by item—looking at the matter in a business point of view—and come to a stated result of what money he has cost from his birth to his manhood, or when he has attained a condition of self-support.

But how can we estimate the many weary, anxious watchings for months and weeks before, and the mystery, pain, and peril of his advent into the world? This can neither be computed nor compensated in money. Then the long years of tender care, the self-denial, and confinement to parental duty; the nursing, watching, sickness, heartaches, and the other ten thousand nameless items of moral and physical expenditure—who is wise and patient enough to compute all these? As the youngster grows older and seeks to set up and assert his own independent existence, yet is too weak, wayward, or wicked to be safely trusted with his new-found power, it requires a strong and steady hand so to navigate the craft as to keep it off the rocks and escape wreck and ruin. Alas! how many are stranded, maimed, crippled, or drowned at this period, when almost grown! Who can compute the cost and the loss in such a case? For what sum of money would you, reader, undertake to do all this for the offspring of a stranger? pay all bills, all costs for damages,

and to bring him up to the point of self-support? Among the nobility in the Old Country monarchies, a young cion of aristocracy has governesses, tutors, companions with whom to travel, and it is safe to say that many thousands of dollars are expended on him.

Even among the middle class the cost must be counted by thousands; and the poor man's child costs somebody—the town or charity—no inconsiderable sum to bring him up to self-support. If neglected, and the child comes up without care, culture, education, or training, he becomes an expensive item to the corporation or the State. He lives by foraging and by other crimes, and it costs something for police service, courts, jails, prisons, and the gallows!

Is it not cheaper and better to *prevent* crime than to *punish* it?

In estimating the cost for bringing up a child properly, we must include his education. This may be plain and useful only, or it may include the ornamental accomplishments—music, drawing, painting, sculpture. It costs something to teach a boy a trade or a business, or any other profitable pursuit. But this is, in part, what constitutes the difference between one who is civilized and one who is a savage.

It is therefore seen that to properly rear a self-supporting human being is at least quite an expensive matter. Then what a loss! besides the sad, sorrowing grief it must be when a child of one, two, three, or five years of age dies. In such a loss there is no gain, no compensation.

We introduce this subject simply to impress on the reader's mind the *duty* of *ECONOMY* in the matter of saving human life, health, strength, and power. One has no right to trifle with a subject so important. We are not now speaking of the sacredness of human life in its moral or religious aspect, but simply as a worldly matter—even in the light of dollars and cents.

We indorse the following sentiment, so quaintly expressed by Mainwayringe:

"Nor is it left arbitrary, at the will and pleasure of every man, to do as he list; after the dictates of a depraved humour and extravagant phancy, to live at what rate he pleaseth; but every one is bound to observe the Injunction and Law of Nature upon the

penalty of forfeiting their health, strength, and liberty—the true and long enjoyment of themselves."

We take the ground that parents have no right to transmit disease to offspring; that it is the right of every child to be well-formed, clean, sane, sound, temperate, and of well-conditioned parentage. But what sort of materials enter into most human structures which now bless, or curse, the world! We are breeding a vast quantity of low, bad, worthless trash, weeds, mere weeds, when we *ought* to raise godlike MEN and WOMEN.

What kind of fathers are the whiskey drinking, tobacco-using, slipshod creatures who make up the bulk of our "miserable sinners?" And how much better are many of the soft, silly, ignorant slatterns, who know nothing of the duties and responsibilities of maternity, and who yet become mothers? It is lamentable that this matter of human procreation is left to chance, and that the world must be cursed by such miserable work as we see all around us. We repeat the question, what is the cost and what is the commercial value of a man?

SCIENCE AND RELIGION.

"**H**OW great a matter a little fire kindleth!" Half-a-dozen scientific investigators, who have recently given out the results of their searches after knowledge, have caused a great commotion in the religious world. Newspapers and pulpits resound throughout the land at the "big scare." The white cravats seem to be afraid that the scientists will knock out the underpinning of their theological structures, and that their religions will come tumbling down, as though earth or heaven could be moved by finite mortals. Can truth be crushed? Let us look at these things from a phrenological point of view. Take the human head. Here are the perceptive faculties in the lower part of the forehead; there are the reflective faculties in the upper forehead. Then there are the moral, religious, or spiritual faculties in the top of the head. Is it likely or possible for these faculties to change their positions or their functions? Not much. It is the office of one class of organs to do one kind of work—to look, see, observe; and for another, higher up, to think, study, reflect,

with regard to the relations of things. And no fear need be entertained that anybody will ever find out what God, in his wisdom, intended to hide from his creatures. He gave us not only a desire for knowledge, but faculties by which to acquire it. Let them be used to the fullest, and with due reverence. Let us find out, if we can, what is the end and aim of human existence. We penetrate earth and sky, air and water, with telescope and microscope, to learn what is in the Book of Nature. We study man, animal, and plant, and ask God's blessing on our studies. But will this lead us to the end? Suppose we exhaust chemistry, astronomy, geology, and the rest—what then? Though our little cup may seem to be full there are vastly

“More things in heaven and earth

Than were ever dreamed of in *our* philosophy,” and we may move up into the higher tene-ment of our cranial dome and look with prophetic eye into realms beyond. Science can never outreach faith! Philosophy can not surpass religion. Human knowledge can not supersede Christianity! When active and industrious investigators find out something really new and useful in the field of science and philosophy, let godly men not be terror-stricken, but welcome and *use* the new discovery for the dissemination of knowledge among men. It is an evidence of an unsettled faith, a doubt of one's religious profession, to be frightened out of his boots at every new discovery in the field of science. He is a timid coward who is afraid to meet the truth. Science and religion are *not* antagonistic, the one to the other. Rightly interpreted, all truths harmonize. Calling a man a materialist or fatalist, or infidel, does not make him one. Calling a man a Christian does not make him *that*.

Let scientific investigation go on. If it upsets superstitious dogmas, so much the better. Who wishes to entertain erroneous doctrines? Are there men among us so wise that they already know everything? Let them open their peepers just a little wider and take in a few more rays of light. The world will not go to everlasting smash on their account. But, in the interests of good fellowship, we propose to arbitrate between the scientists on one hand, and the bigots on

the other. We will invite them to assemble in convention, and permit us to examine—first, their discoveries and their creeds; then their *heads*, and show them *why* they think as they do. It will be seen why one is a skeptic, and the other a believer; why one is disposed to contend with another. Then, after teaching them a few useful lessons in good manners, Christian kindness, charity, and common sense, we will bid each to pursue his vocation in the love and fear of Him who will judge us all with righteous judgment.

THANKSGIVING, CHRISTMAS, NEW YEAR.

THANKSGIVING.

THIS is the season for giving thanks. It is a good old custom, derived from our pious Pilgrim fathers, who passed through trials of pioneer life the present age knows not of. But we will perpetuate the custom. It will prove a tie to bind wandering hearts more closely together.

Dame Nature has been bountiful in rewarding the husbandman. The harvests are gathered in, and we are ready for the purifying powers of the frost. The “beautiful snow” will soon be here, and farmers, teamsters, skaters, and school-boys will be thankful for this.

Orators, statesmen, and preachers will “hold forth,” declaiming on the many blessings we enjoy—the blessings of peace, plenty, health, schools, employment, and the means by which men may grow in grace. And they are real. There is always more to be thankful for than to regret. If man be totally depraved, there is a way of redemption, regeneration, and of salvation. No one is *fated* to be lost. The fact that man *may* improve, is an evidence that God meant he *should* improve. The race stands on a higher plane to-day than at any previous period in history. PROGRESSION is the order of nature. God be thanked!

“Let all the lands, with shouts of joy,
To God their voices raise;
Sing psalms in honor of His name,
And spread His glorious praise.”

We are on the brink, dear reader, of the year 1874. Soon we shall step over into the new. Already the world is giving

thanks for blessing past and for blessings prospective. Thanks for "life, liberty, and the pursuit of happiness," as the Declaration hath it. Thanks for peace, plenty, and prosperity. Yea, THANKS FOR EXISTENCE! *It is a blessed thing to live!* Yes, but what about those "aches and pains?" Oh, they are only temporary, and are sent for our good; to warn us not to "get off the track," and to bring us back into right relations. Health is normal, disease is abnormal. The right use of all our organs of body, and of the faculties of the mind, is acceptable to Him who created them; while their wrong use, or perversion, is sinful, and brings pains and penalties. We should, therefore, be thankful even for these painful *warnings*, and accept them as for our good.

CHRISTMAS.

Christ came into the world to teach man the way of eternal life, the resurrection, and to reconcile man to God. His life and His death were examples for our instruction. The wisest of the race accept that example, and find great comfort to their souls. All His life, all His acts, all His teachings, are in perfect harmony with all we know of the laws of life, of mind, and of soul. Regarded even as a man, an "Elder Brother," there never was on earth another whom it would be so safe to follow in all things. We, with our finite minds, can conceive nothing higher, nothing greater, nothing better than the doctrines taught by the meek and lowly Nazarene.

Our field of study is that of science, rather than that of Theology, but we are bound to affirm that there is nothing in all the realm of human knowledge which is not in harmony with, and subordinate to, the Christian religion. Christianity comprehends all, is the whole; other knowledge is at most but fragments of the all-comprehending teachings of Jesus Christ. It is only through Him we can come into *rapport* with Divinity.

Christmas is a fit commemoration of *the* event since the creation of the world and of man.

NEW YEAR'S.

A mile-stone on the road through life. We observe it as a day of good resolution. On New Year's Day we open new books. We date new enterprises from January 1st, and

determine to drop bad habits, to "turn over a new leaf." Everybody who is anybody, wishes everybody a Happy New Year. We are a little in advance, but it is never too soon to do a good thing, and so we sing praises in this November number to Thanksgiving, Christmas, and the coming New Year.

The PHRENOLOGICAL JOURNAL greets all its patrons with thanks, gratitude, and all good wishes.

POWER OF EXAMPLE.

PRECEPT is one thing, example is quite another. A witty clergyman said to his flock, "Do as I *say*, not as I *do*." Another, who had been accused of inconsistency in not practicing what he preached, answered, "You pay me so much a year to preach to you; if required also to practice what I preach, you must double my salary."

Consistency is always expected in others though consistency may be little practiced by ourselves. A mother expects her daughter to tell the truth always, while she herself prevaricates. A father expects his son to become a better man than himself, and, God be thanked, he may, especially if he have a pious, intelligent, and godly mother, who teaches, trains, and guides him.

The father smokes, chews, drinks, or swears, and he is "shocked" to find his son following his example! With a quid, a cigar, or a pipe in his mouth, he flogs his son for swearing or for using tobacco! Children not only inherit the physical and mental peculiarities or tendencies of their parents—of one or of both—but also a disposition to imitate their example. The little girl plays mother with her doll baby; the little boy puts on his father's hat and boots, and plays "ride horse" astride the broom-handle. The father exhibits affection by kissing and caressing—the boy imitates him. Imitation is large in children, and hence they are "apt scholars" in whatever they may see, be it good or be it bad. What parents may wish their children to become, that they themselves must be. So of the preacher—his flock will follow his *lead*—not always his *advice*. If an employer would have his work go on properly—all hands promptly at their posts, he must not himself loiter or be in the

drag. They will watch him, and, as a rule, do as he does.

Ben. Franklin was a close observer of human nature, and expressed many a truth in couplets; this is one:

"He who by the plow would thrive,
Himself must either hold or drive."

If we would grow in knowledge, in honor, in power, and in grace, we must erect for ourselves a MODEL, as an EXAMPLE, and work to its lines.

"Let us do unto others as we would that others should do unto us."

AMERICAN CHILDREN.

WE find the following in an exchange: "Lord Dufferin, in a speech at the Montreal Normal School recently, said: 'I confess if there is any criticism which I have to pass upon the youth of this new country—I do not say of Canada especially, but of the continent of America—it is that I have been struck by the absence of the deference and respect for those who are older than themselves to which we still cling in Europe. I have observed in traveling on board the steamboats on the St. Lawrence, children running about from one end to the other, whom, more than once, I have been tempted to take up and give a good whipping. I have seen them thrust aside two gentlemen in conversation, trample on ladies' dresses [did those ladies wear long trails, and take up a great deal of room?], shoulder their way about, without a thought of the inconvenience they were occasioning, and, what was more remarkable, these little thoughtless indiscretions did not seem to attract the attention of their parents. When I ventured to make an observation on this to the people with whom I have been traveling, I was always told that these little pleasing individuals came from the other side of the line [*i. e.*, from the United States]. Well, I only hope that this may be so; at all events, without inquiring too strictly how that may be, I trust that the teachers of the schools in Canada will do their very best to inculcate into their pupils the duties of politeness.'"

[The difference is simply this, the old country, where "my Lord Dufferin" was brought up and permitted to "lord it" over common folks, is an aristocratic monarchy, while here, in America, especially in these United States, we are governed, or claim to be governed, according to Democratic Republican principles. *There*, children are taught to bow down to kings, queens, lords,

nobles, and princes, and to show great deference to *royal* flesh and blood. Here we have no such nonsense. Here "a man is a man for a' that," and even children, who do not come into the world by their own seeking, are supposed to have rights which even a "lord" would be required to respect, whether he be drunk or sober.

Liberty does not imply license any more than devotion implies idolatry, or economy implies selfishness. License, like idolatry, is simply perversion of order and propriety.

We can not help smiling when these foreign "lords" come here and criticise, or want to whip our little children. Have they forgotten Bunker Hill? When it comes to whipping, as many as two can play at that game, and "lords" are as liable to get whipped as other folks, and we have no doubt it *hurts* just as much. Would it not be just as well if there were less whipping in the world? But if "lords" insist, why then, we say, let *them* have it, till *they* cry "enough."]

ADULATION.

PUBLIC characters are generally fed on flattery. Is he a popular preacher? Has he moved the hearts of many? Have men and women or, we should say women and men, fallen down at his feet and worshiped *him*? Yea, verily, and their praises are ever ringing in his ears. What effect must this have on our "popular preacher?" If he be human, if he abound not in the grace of almost infinite meekness, he must be affected by these demonstrations. He must look out. He is in danger. Others will be envious. And he may, himself, become a creature of vanity. So of a popular physician who by his skill and wisdom "snatches a brand from the burning," as it were, and restores to life one that was sinking. What gratitude can be too great for such services? and how friends of the rescued rally round the good physician, and almost worship *him*. So of a great statesman. Like Washington or Lincoln, he earns and receives the gratitude of the millions whom he benefits. He becomes an object of veneration and of adulation to many. He must indeed be great and good, not to be touched

and made more or less proud by this exaltation.

If we come down to lesser lights, we find authors, poets, musicians, actors, and even editors becoming centers of attraction and receiving the praises and plaudits of the unthinking multitude. Still lower down in the scale, we shall find men who are proud of their wealth, their horses, their fine clothes! others of their muscular power. Even such as these have their flatterers, and when they die great throngs follow their bodies to the grave.

What is it that causes this state of things? Let us see. Large Self-Esteem, with a cultivated intellect and a predominant moral or religious sense, will manifest great dignity, and will usually be placed in the lead. A man with large Self-Esteem, and *without* culture or moral sense, will become haughty, domineering, dictatorial, and a usurper. For any achievements he may attain, he gives *himself* the glory.

But it is love of praise, large Approbateness, with less Conscientiousness, which begets the spirit of adulation, and which makes the flatterer. When seen in the little girl, it is considered "so tunning," and when rigged out in showy attire, it exclaims, "O, ain't I pretty!" The little boy becomes boisterous when his vanity is excited. "He put in his thumb, and pulled out a plum, and says, what a brave boy am I!"

We need not characterize young men; their vanity is too conspicuous to require illustration. It may be seen when they first begin to shave, part their hair, or trim their feeble whiskers; or, when through large imitation of General Grant, they begin to smoke. They are sometimes called "insufferable puppies" by other puppies. These young sprigs of noble sires soon become the adored by simple-minded, lisping misses, and then they "put on airs."

Young ladies, who have been well brought up, are more modest and sensible. If they are fortunate enough to meet young gentlemen of culture and of moral sense, they become honored wives and loving mothers. These are satisfied when performing their duties. They do not seek notoriety, but are always ready to act their part where duty

calls. Such will be found to have well-balanced brains and well-trained minds, while the seekers of notoriety are rickety, shaky, warped, unfortunate. The difference between honored reputation and love for notoriety is as great as between real honest merit and the veriest empty sham and worthless show. One subordinates *self* to principle—the other subordinates principles to self. The one acknowledges a supreme Creator; the other claims to have created himself. One is meek and modest; the other a blatant egotist. The one is loved; the other is despised. The difference between honest approval and encouragement and flattery is as great as between light and darkness. Adulation is flattery, and flattery is falsehood.

A "DRUMMER" ON DRINK.

COMMERCIAL agents are sent out from all our cities to secure orders for goods from country merchants. These agents, mostly young men, count on having "a good time"—otherwise called "a light spree"—at the taverns where they pass their evenings. Recently several of these "good fellows" met at one of the temperance towns in Ohio, when one proposed that they go forth in quest of a little of the "critter," which could not be obtained at their hotel. They traversed every street in the village, stopping at each drug store, dining saloon, railway station, bowling alley, and billiard saloon, but not a drop of alcohol could they find. On taking a vote, it was decided that "prohibition" actually prohibited *them* from procuring strong drink.

It is often said that prohibition increases, rather than lessens, the consumption of alcoholic liquors. The above is from a personal confession of a commercial "drummer."

EXPERIMENTS IN PSYCHOLOGY. — Some time since we were invited to witness the performance of Mr. Brown at the Sturtevant House in this city. Mr. Brown was blindfolded, when some person in the room would hide a knife or pencil in the room or in another room. Mr. Brown would take this person's hand and place it on his own forehead, and instantly start for the hidden article, following, as he asserted, the mind of the subject. In this manner Mr. Brown would rush his subject, himself being blindfolded,

through passages, doorways, around and between obstructions, until the article hidden was reached. One man would think of another, and Mr. Brown would lead him to the one he thought of. He had the letters of the alphabet on large cards hung on a long line across the end of the room, and he would, when blindfolded, lead his subject to the letters which spell any word or name the subject would think of. In a long series of experiments he was entirely successful when he had a subject who could keep his mind on the topic or word thought of.

Is not this brought about through mesmeric or clairvoyant power, which enables

him, when the hand of a man is on his forehead, to read his thoughts?

Mr. Brown is slightly built, of a highly mental or nervous temperament, very susceptible to magnetic impressions, which enables him to come into nervous and mental sympathy with his subjects. Some persons he seemed to read more clearly and positively than others. One man could not impress him as to whom he was thinking of, when he was requested to tell another person, and that person impressed Mr. Brown to go straight to the man indicated. It is wonderful, but we could not help asking, "What is the use of it? What does it prove?"

AGRICULTURAL HINTS.

Watering Horses After Meals.—It is the practice with many horsemen to give their horses no water until after they have eaten their allowance of feed. Concerning this practice a veterinarian writes: A full drink of water immediately after being fed should never be allowed to horses. When water is drank by them, the bulk of it goes directly to the large intestines, and little of it is retained in the stomach. In passing through the stomach, however, the water carries considerable quantities of the contents to where it lodges in the intestines. If, then, the food of horses' stomachs is washed out before it is digested, no nourishment will be derived from the feed. In Edinburgh, some old horses were fed with split peas, and then supplied with water immediately before being killed. It was found that the water had carried the peas very far into the intestines, where no digestion took place at all. Mr. Cassie is quite correct in the views set forth regarding the injurious effects of large quantities of water swallowed immediately after eating. A small quantity of fluid swallowed along with, or immediately after dry food, beneficially softens it and assists in its subdivision and digestion. An inordinate supply of water, or of watery fluid, on the other hand, proves injurious. It dilutes unduly the digestive secretions; it mechanically carries onward the imperfectly digested food, and thus interferes with the proper functions of the canal and incites indigestion and diarrhea. These effects are especially apt to occur where horses freely fed and

too liberally watered are shortly put to tolerably quick work. There is no more infallible method of producing colic, diarrhea, and inflammation of the bowels. The horse is not peculiar in this effect; dogs, and even their masters, similarly suffer from copious draughts of water immediately after eating much solid food.—*New York Herald.*

Waste Nothing.—The Chinese, more than any other people, have reduced the saving of fertilizers to a science. It is well known that they scrupulously save, disinfect, and put to valuable use every particle of offal. In no other way could their land be so enriched as to support its teeming inhabitants. Liebig traced the primal fall of Rome to the building of her great sewers, which conducted to the Tiber fertilizing material which should have been applied to her soil. It was the lack of breadstuffs, consequent upon the poverty of the arable lands, which drove the Romans to foreign conquest, and ended in the overthrow of their own liberty. Our people are wasting every day substances, which, if properly utilized, would save them many a dollar and much tribulation.

A Doubtful Case.—The *Agriculturist*, in reply to a correspondent, said: We should hesitate to advise a man with a young family, and possessing but \$800, to buy a farm in the East, which is most likely badly run down, for \$3,000, in the expectation of making a living and paying for the farm out of the crops. There are some men who might succeed, but these are very few, and the probabili-

ties are very much against a success. We should also hesitate very much to advise such a person to go West, if he can make a living where he is at a mechanical trade. Although a soldier's homestead can be procured for nothing, yet the care of a young family would be a serious burden in a new unsettled country to a man with such scanty capital. The far West is for enterprising young men without families, or older men with plenty of help, or for persons with money sufficient to carry them over the unproductive period. A worn-out farm in the East requires money and skill to restore it, and skill is a greater necessity and a rarer possession than money.

Vermin increase in the early autumn, and no fowls will thrive if kept in close, filthy quarters, where lice abound. A coat of hot limewash, with an ounce of carbolic acid dissolved in it, will free the roost from lice. Clear out all the droppings, and spread them evenly in the compost heap. As the old fowls get fat upon the stubbles and in the straw yard, they should be sold off or used in the kitchen. A stewed fowl is more wholesome food than fried pork at any time. To give fowls the run of the barn is a wasteful practice.

Economical Feeding.—The *Irish Farmers' Gazette* describes a method of feeding cattle when forage is dear and labor cheap, which combines many excellent points. The materials are roots, hay, and meal. The preparation is made by pulping the roots, chaffing the hay, crushing the grain, and steaming the whole together. By two months of such feeding, cattle are made to increase as much in weight as by four months with unprepared food.

Points of a Good Cow.—A writer in the *North-western Farmer* gives the following hints to those about purchasing milking stock: a crumply horn, full eye, head small and short, dished face, that is sunk between the eyes, skin soft and loose, deep from the loin to the udder, and very slim tail.

Farmers' Children.—Every girl and every boy should have the care of something belonging to him or her, to raise, or cultivate, or improve. When there is plenty of room, as on a farm, boys should own a horse or a cow, or have a portion of the garden to cultivate. Girls should be allowed to possess a beehive, or a certain number of hens, or fruit-bearing vines; something of value, that by care and proper cultivation increases and returns a value for

itself. Children will acquire an interest in and derive a happiness from this form of industry that will repay the effort and trial.

To Exterminate Rats.—A correspondent of the *Tribune* says: Take copperas, the quantity to depend upon the number of buildings or places infested, pulverize it very fine; and be sure and sprinkle some in all the buildings—in a word, wherever they congregate—and in a few days all the rats will be gone. This is very simple and easily tried, and has proved completely successful several times at different places. No rat has been seen three days after a thorough application.

IMPORTANT EVENTS WHICH OCCURRED IN OCTOBER.—October 1. Corneille died, 1684; First steamer in United States, 1807—2. Aristotle died, 322 B.C; First railroad in United States, 1833; Andre hung, 1780—5. Jonathan Edwards born, 1703; Cornwallis died, 1805—6. Jenny Lind born, 1821—7. Edgar A. Poe died, 1849—8. John Hancock died, 1793—9. Cervantes born, 1547—10. Benj. West born, 1738—11. Zwingli killed, 1531—12. Hugh Miller born, 1802—13. Murat shot, 1815—14. William Penn born, 1644; Battle of Hastings, 1066—15. Bank panic, 1857—16. Marie Antoinette guillotined, 1793; Kosciusko died, 1817—18. Reaumur died, 1757—19. Surrender of Cornwallis, 1781; John Adams born, 1735; Leigh Hunt born, 1784; Swift died, 1745—21. Battle of Trafalgar, 1805—22. Battle of Red Bank, 1777—23. Burgoyne surrendered, 1777; Battle of Edgehill, Ireland, 1642—24. Daniel Webster died, 1862—25. Demosthenes died, 322 B.C.—26. Great storm in England, 1703—27. Brutus died, 42 B.C.; Dr. Andrew Combe born, 1797; Madame Pfeiffer died, 1858—28. John Locke died, 1704—29. Sir Walter Raleigh beheaded, 1618—31. Earl Rosse died, 1867.

IMPORTANT EVENTS WHICH OCCURRED IN NOVEMBER.—Nov. 1. Benvenuto Cellini born, 1500; Great earthquake at Lisbon, 1755—2. Mendelsohn died, 1847—3. McClellan removed, 1862—4. Peabody died, 1869; Lincoln elected, 1860—5. Gunpowder plot discovered, 1605—8. Milton died, 1674—10. Arnold at Quebec, 1775; Mohammed born, 570—11. Luther born, 1483; Prince of Wales, 1841—12. Pilgrim Fathers landed, 1620—13. George Fox, Quaker, died, 1690—14. Liebnitz died, 1716—15. Lavater born, 1741; Kepler died, 1630—Anadeo King of Spain, 1870—18. Jay's Treaty, 1794—18. Thorwaldsen born, 1770—20. Mariner's compass invented, 1302—22. Havelock died, 1857—24. Dr. Parkman killed, 1849; Sterne born, 1713; John Knox died, 1572—25. Isaac Watts died, 1748; John Kitto died, 1854—26. Priessnitz died, 1851—27. Phonography invented by Pitman, 1837—28. Baron Bunsen died, 1860; Washington Irving died, 1859—Euripides died, 407 B.C.; Swift born, 1667.

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

To Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH *that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.*

QUESTIONS OF "GENERAL INTEREST" ONLY *will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.*

TALKERS AND THINKERS.—Can you tell an old reader of your valuable JOURNAL why the conversational powers of some celebrated persons, such as Addison and Oliver Goldsmith, were lower than we might expect in such great men? I have seen a list of the names of such persons somewhere, but can not now recall to my mind where. Perhaps you or your numerous readers will be kind enough to assist me to find it.

Ans. A man may be a great thinker and writer and not be a good talker. Some men can write and talk, but they are not sociable in disposition, and it is only in controversy or in dogmatic teaching that they talk well. Some are so friendly that they wish to communicate with others, but being but poorly endowed with the power of language, they press the hand or caress the friend, or in some other kindly way indicate affection, but the tongue is wholly inadequate to the expression of the friendly feeling. Others are full of language and fact and thought, and can talk freely and interminably, but if they lack kindness, friendship, and love, there is no soul in their talk; it is brilliant but cold, like moonlight on fields of snow.

In 1841 we met Prof. Hall in Columbian College, Washington, D. C., and attended a course of his lectures on chemistry and natural philosophy. His lectures were entirely written, and requiring experiments, it was singular to see him handle retorts and other apparatus, looking alternately at his notes and his work. He was an elegant writer, but he informed us that he could not extemporize at all to his satisfaction. A year afterward, while lecturing at Grafton, Vt., we were informed that Prof. Hall's father was formerly the pastor of the church there, and that he could not, or would not, give out a notice from the pulpit without writing it, and that the blank leaves and margins of the pulpit hymn-book were covered with such memoranda which had been read to his congregation.

Sometimes while the last singing was in progress, a deacon would step up the pulpit stairs and inform the minister that a notice had been neglected, when he would seize his pencil and hymn-book, and detain the waiting congregation while he would write the notice, and then read with due gravity: "There will be a meeting for prayer and conference on Wednesday evening at early candle-light, at the house of Deacon Smith," and then he would pronounce the benediction, which he had committed to memory, and always used the same words—yet he was an able man, a good writer, and a D.D.

Habit sometimes trains persons to think correctly in words only at the nib of the pen; others only at the tip of the tongue; others only silently, and to be brought out in works, not words.

Some have large Language and but little faculty for thinking; others have a mind laden with thought, like a well-filled distaff, with little power to spin it into words.

Who can recall the list of names referred to by our correspondent? —

DO WE PRACTICE WHAT WE PREACH? —In your book "How to Read Character," you state that Mr. Combe was so deficient in the organ of Calculation that he was never able to master the multiplication table. I have always considered one of the doctrines of Phrenology to be that any organ is capable of being cultivated to almost any extent. If such be the case, why is it that phrenologists do not practice what they preach? Please answer in June JOURNAL.

PAUL PRY.

Ans. Do phrenologists claim that an organ or a sense which is deficient may be created? If one be born without eyes can he see? or, if without the organ of Color, can he, by any amount of cultivation, distinguish the different shades, hues, and tints in colors? No one claims this; but we do claim that the cultivation of existing faculties will still further strengthen and develop them. Mr. Combe considered himself deficient in the organ of Calculation, idiotic in that respect. Here are his own words on the point:

"I can speak on this subject the more decidedly from being myself very deficient in this faculty, notwithstanding my exertions to cultivate it. Arithmetic has always been to me a profound mystery, and to master the multiplication table an insurmountable task. I could not tell you how many eight times nine are without going to work circuitously, and reckoning by means of the tens. Yet for seven years I studied arithmetic. This deficiency has been the occasion of much trouble to me. I could understand everything relating to

accounts, but had always to employ clerks to perform calculations. This faculty in me is, in fact, idiotic, and the organ is very small. Were my other powers in like condition, I should be totally unfit for the ordinary business of life."

Do you now see it, Mr. Paul Pry? A little Causality is a good thing to help one to reason and find out seeming mysteries.

BOOTS AND SHOES MADE TO ORDER.

—A subscriber writes us from Longtown, Mississippi, as follows: There are many persons in the country who would gladly avail themselves of an opportunity of sending north to some reliable manufacturer and having their shoes made to order, and at reasonable rates. Where is the manufacturer who will do such work faithfully and reasonably? Can the JOURNAL give us any light?

Ans. The JOURNAL waits for answer from such trustworthy manufacturer. Why not advertise?

EARLY TELEGRAPHY.—In J. S. C. Abbott's History of Napoleon, Vol. 1st, page 251, is found this statement: "The intelligence of Napoleon's arrival was immediately communicated by telegraph to Paris, which was six hundred miles from Frejus." This occurred on the 8th of October, 1799. What was the system of telegraphy to which the author refers? Of course it was not the electric system now in use, for the news did not arrive in Paris until the evening of next day.

Ans. The early modes of communicating important intelligence by means more rapid than messengers or couriers, were fires and signals. The Semaphore, which preceded the electric system, was adapted in France in 1794 for the purpose of transmitting news of the movements of the French armies from the frontiers to Paris. Semaphores were towers built on hill-tops at intervals of from five to ten miles. On the towers were set the telegraph apparatus, which comprised six shutters arranged in two frames, by the opening and shutting of which in various combinations sixty-three different signals could be formed. Although long lines of these towers were necessary for communication with very distant places, yet little time would be necessary for officers skilled in the signal language to convey information.

LOP-SIDED HEADS.—A young man says: The organs upon the left side of my head are perceptibly smaller than those upon the right side. Why is this so? and is there a remedy?

Ans. This is not unusual. Indeed, most heads, like most faces, are more or less lop-sided. Few are quite regular. Look at noses, at mouths, and at eyes. Slight or marked irregularities may be seen in most adult faces. Remedy: be thankful it is no worse, and do not let it trouble you.

DAY DREAMING.—How can I free myself from the habit of day-dreaming? My mind wanders.

Ans. Study mathematics; engage in solving problems; bring your mind down to matters of fact; read works on natural history, on the natural sciences; give up romance, novels, etc.; try

your hand at mechanism; invent and use machinery; finish what you begin, and you will cultivate application and prevent the mind from wandering.

A QUESTION IN COOKERY.—Will you inform a reader how oatmeal cracknels are made? I have heard that they are excellent as an article of food.

Ans. Oatmeal cracknels, or bannocks, as the Scotch call them, are excellent indeed, and are usually made as follows: Take the best quality of oatmeal and stir in barley with enough water to wet it through; add a pinch of salt; let it stand for ten minutes to swell; then roll out the mixture a quarter of an inch in thickness, first flouring the board and rolling-pin with wheat flour; cut it with a biscuit cutter, and bake in a moderate oven, as these cakes will burn quickly, and only require to be of the lightest brown. They will snap easily between the fingers, and are delicious for lunch, requiring no butter to make them palatable. If put into a close jar, they will keep for several months. In the Highlands of Scotland they preserve their bannocks in the barrel of oatmeal, and can keep them a long time. This question, like hundreds of others relating to diet, has been considered in the *Science of Health*.

BIBLE PUZZLES.—Please explain that passage of Scripture which says: "The thing that hath been is that which shall be; and that which is done is that which shall be done, and there is no new thing under the sun."

Ans. The life of King Solomon was varied and full of incident. He was rich, powerful, possessed talent, and all appliances for enjoyment and achievement. His career, however, was of such a character, and his experiences so unsatisfying, that he exclaimed: "Vanity of vanities, all is vanity. What profit hath a man of his labor which he hath done under the sun?" He goes on to enumerate that "The sun comes back to where it started, and the wind returneth according to its circuits; the rivers run into the sea, yet the sea is not full, and unto the place from whence the rivers came thither they return again; and there is nothing new under the sun."

He did not, of course, think of or refer to the scientific and mechanical inventions and progress which have since blessed the world. He looked upon things in a practical, sensuous, physical, and animal way. Any one who will read the book of Ecclesiastes will find a picture of the vanity of low pleasure which ought to make him wise. He will also find there warnings against a bad course, and incentives toward a good. But we will not preach a sermon on this occasion.

Our correspondent, meditating on the statement of there being "nothing new under the sun," seems from that to have wrought out another question, to wit: "Does God create a new spirit for each person that is born into the world, or did He create them when he created all other things?"

Perhaps we ought to refer our young friend to his pastor, for, ten to one, the minister would not be satisfied with the answer which we shall give. The uniting of a body with a soul or spirit during the present life is a mystery. We do not suppose that birth, according to the laws of life, is a new creation; it is simply a developing process, a reproduction; and the connection of a soul with each body is a part of the original creative plan, and needs no special creation. For, it may be observed, that children inherit a tendency to the mental peculiarities of their parents quite as much as they do their physical qualities, showing that the mind has a relation to ancestry as much as the body has. If a child does not seem to resemble its parents in disposition, as well as in form and complexion, people wonder, and look back to some earlier branch of the family for the peculiarity, showing that the popular sentiment accepts the idea that we inherit a soul and mind as well as a body.

LIKE BEGETS LIKE.—Is it really true that “like begets like?” We see short persons born in tall families, and persons of weak intellect, and those who are weak and wanting in many respects, from parents who seem to be exceptionally well-formed, sensible, and all right. T. B.

Ans. Yes, like does beget like. Shanghais beget Shanghais and Bantams beget Bantams. In the human race sometimes a man will himself raise a large family, will be tall and strong and live to a good old age; but he overworks, or acquires a habit perhaps of smoking, or something else as bad, and he does not have a child within six inches as tall as himself, or within thirty-three per cent. as strong, or that lives as long; but those children, if they eat and drink rightly, and have no bad habits, may beget families that will bring up the altitude; and you may depend on one thing, if a man is not so tall or strong as his father and mother, something has happened. Some have club-feet, some have hare lips, some have other deformities, yet the club-footed or hare-lipped person will beget one that is strong and all right. He himself is a kind of accident, but he has in him the spirit and build and strength of his race. We may always be certain that there is no such thing in nature as *happening*; everything is molded and governed by law. If a stick of timber does not last as well, and is not as strong according to its size as its native stock ought to be, something is the matter with the soil on which it grew, or with the aspect of the ground with regard to the sun or the wind. Nature *does* produce after its kind; but there are so many difficulties in raising human beings that sometimes the conditions are not all properly met, and we are not wise enough, or sufficiently well-informed as to the facts, to settle all questions. Your case probably comes into that range. We suppose it is true that if we were to take one of those Spitz dogs, with hair six inches long, to the city of Mexico, and let him breed with one of his kind, in seventy-five or a

hundred years there would be scarcely a hair on his progeny, hair not being needed there, while at the North it is needed. If the hairless fellows were brought back again to New York, and thence to Montreal, and so on to Spitzbergen, they would, ultimately, have long hair again. Nature is kind to her children, and seeks to adapt them to their conditions.

THREE CROWNS.—My little girl has three separate crowns to her head. What do they indicate?

Ans. There is not the slightest significance to the crown any way, or to a double or triple crown. Neither the scalp, skull, nor brain are in any way affected by it. Some have a “cow lick.” Of course there is a reason for it, but it does not affect the mind any more than a mole or a wart, or a freckle, or turning in of the toes.

What They Say.

DESTRUCTIVENESS IN PHYSIOGNOMY.—**EDITOR PHRENOLOGICAL JOURNAL**—I wish to communicate to the readers of the JOURNAL the results of a few observations which I have made relative to the physiognomical sign of the faculty of Destructiveness. On page 55 of the hand-book “How to Read Character,” are two figures, one representing a prominence of this organ, and the other a deficiency. The point to which I wish to refer most particularly, however, is the projection of the upper jaw in the cut which is intended to represent the large development of the destructive propensity. In connection with these illustrations it is stated that carnivorous animals, as the lion, tiger, and eagle, and hawk, possess this peculiarity, and, it is believed, that in man analogous physical peculiarities denote a corresponding agreement of character. A very remarkable case bearing on this point came under my notice a short time ago.

Being one day in a store in an Arkansas village, I observed a man enter and trade who would have attracted the attention of any one desirous of studying human nature. His step was quick, yet strong; his eye glanced rapidly over the room and seemed to take in the whole at a glance, and his voice conveyed an impression of a blow being delivered at every sentence. But the most remarkable physical feature was the enormous projection of the upper jaw and lip. Remembering the ascribed sign of Destructiveness mentioned in your text-book on Phrenology, I determined to ascertain the man’s history if possible, and satisfy myself at least, whether the projection of the upper maxillary did in the present instance correspond with the real character. My inquiry resulted in substantially the following: The man was the notorious “Bill Brazel,” who during the war murdered more men, perhaps, both in combat and in cold

blood, than any of the other bloodthirsty bush-whackers who were terrors to the people of the State of Arkansas. Many were the daring deeds related to me of this man. On one occasion, it is averred, that he killed eight men while ascending a hill, and at another time he pursued a flying enemy, overtook him, and literally hacked him to pieces with the man's own knife, which he drew from his belt for that purpose, and which the man was too much frightened to use himself. These are sufficient to show the ferocity of his nature, and which fully accorded with his immense physical development, the greatest I ever saw. I was not enabled to ascertain the development of the phrenological organ. I am convinced from other observations which I have made, and which I will detail at a future time if agreeable to the readers of the JOURNAL, that it is one of the many sure tests of character.

C. M. ALEY.

AMERICAN SHIPS.—Under this heading in the "Mentorial Bureau" of your September number, in response to the query, "Why is it that nearly all the steamers which ply between Europe and America are owned by foreigners," you respond, in substance, that in Europe labor and many other elements of construction are cheaper than here, which is true; but the materials which enter most largely in the construction of ships, to wit, iron and coal, are not only cheaper here, but of better quality; so much so, that Mr. John Roach, of Wilmington, declares his belief, based upon his large and successful experience, that as ship-builders, we can successfully compete with foreigners.

So much for construction. But having built the ship, we can't afford to keep her, as the rate of interest is so high, as a result of our Government with one hand extended to borrow money at five per cent. gold interest (which, with premium and exemption from taxation, is eight per cent.), and with the other hand strangling the finances and running interest up to five times the rate our foreign competitors pay, it is impossible to keep and run them.

For instance, a first-class steamer, ready for sea, costs \$800,000. If built by the English with money at three per cent. the yearly interest would be \$24,000; if by us, with interest at twelve per cent., \$96,000—excess of our interest over theirs, \$72,000, or about \$1,400 per week, or about \$200 per day, in addition to the "subsidies" you quote.

With five per cent. net revenue for the investment, the Englishman is satisfied, as it is nearly double what his Government pays on its irredeemable bonds. With that net revenue, the American is fast going to ruin.

The trouble is with the national policies; England makes everything subsidiary to her producing interests; America makes everything subsidiary to her money speculators.

The great banker, Rothschild, declared to C. K. Garrison, in presence of A. T. Stewart, that "the

United States paid too high rates of interest; that no nation can afford to pay so much, and none ever cleared as much as four per cent.

VOTE OF SUBSCRIBERS.

WE can not better indicate the general sentiment of JOURNAL readers as to their wishes concerning the size, price, and form of the PHRENOLOGICAL JOURNAL for the year to come than by publishing brief extracts from letters touching the questions proposed. The following are fair samples of many. We print but one of a kind, these showing the tenor of the entire vote. The first was from a lady in Illinois, and should have precedence. It is as follows:

Would you like to have my vote as to the size and price of the JOURNAL? I suppose the ladies are allowed to vote on a question of this kind. I like the JOURNAL as it is, and do not desire a change. I get one number nicely read and digested, with what other reading matter I have, in the month by the time the next one arrives, so that the size and the time of coming are just right in my case.

I shall do what I can for both of your Journals this fall, and hope to be able to send in a few names at least. I lend my Journals to a family who can not afford to subscribe. I have thought many times what would the world do without —. Your work is so different from that of other editors, and it is doing so much good in the world and to the people thereof, that before you cease to work you must see to it that there are properly qualified persons to still carry it on.

E. A. W.

A lawyer writes from Indiana in this hearty, frank style:

Having been a reader of the JOURNAL for fourteen years, and profited more by its perusal than by the profoundest research of any other magazine in America, I am inclined to think that to reduce the size would be at the expense of valuable information, and to enlarge would be unnecessary.

It is expected that an infant should grow gradually, but when it has reached majority, any unnatural flesh would render the person obese, and any diminution would make him lean. In either event the man would be less useful. The JOURNAL having attained majority, we do not wish to see it either obese or lean; it is just right.

F. A. P. writes thus warmly from Texas:

I say whatever you do, do not reduce the size. If anything, enlarge it. The favorite feature of the JOURNAL with me is the biographical sketches of our leading men. Give us more of this.

If a suggestion from a reader in Texas is worth anything, I would offer this: That in the future you bring to bear your best counsel and advice to our young men just growing up, who must soon, whether worthy or not, form the religious and political support of this country. Inspire our sons, if possible, with lofty aims and noble impulses. Wishing you and the JOURNAL a long life of usefulness, I am yours, —.

Here comes a note from the Golden State. It reads as follows:

OFFICE OF THE CALIFORNIA PACIFIC RAILROAD CO., SACRAMENTO—*Dear Sir*: Having been a constant reader of the JOURNAL for many years, I can testify to its excellence and worth. I am interested in every change liable to affect it, for I feel it is working more real good than any other publication in our country. I would not under any consideration reduce the size of it. It is just right for convenience, and volume enough to entertain a variety of subjects, some one of which will be sure to reach the expectation of every reader. Publish it monthly, as heretofore, and at the present rate. Use your own good judgment as regards what is best to publish from time to time, and you will be more likely to suit the majority. Book notices and advertisements are useful, and a looked-for information to us all, but should not be allowed to crowd the object of the work.

Here is from Old Kentucky, with no uncertain sound. We do not forget that Dr. Caldwell of that State, and of Transylvania Medical College, brought Phrenology from the Old World to the New:

"Let good enough alone." But if you must enlarge, give us a "Monthly Scientific Record," *a la* "H. M.," an enlarged Agricultural Department, and a Department of Characteristic Anecdotes of Distinguished Men. I think the *JOURNAL ne plus ultra* now, and if you enlarge, you must enlarge the price also, and that will take it out of the reach of many who need it most. However, I'm satisfied to go with the "crowd" in this matter.

An Ohio voter implies that he would have the *JOURNAL* enlarged. Does he not? He says:

I have more money to give for such reading matter as the *JOURNAL* contains. I can not see how it could be bettered.

A Pennsylvania subscriber says:

Knowing of no *JOURNAL* so well suited to the wants of adults, and admirably adapted to the requirements of their growing minds and bodies, I subscribe for my brothers' sake; as to size and price, my vote is to keep it as it is.

Michigan—a patron says:

The matter it contains is well suited for thought and reflection. I should prefer to have it remain a monthly. I like all the departments; should prefer to have book notices extended than excluded.

E. D., of Pennsylvania, says:

Either enlarge it or keep it as at present. There is no other monthly I like so well.

A beginner says:

This is my first year as a reader of the *JOURNAL*, but it already seems like an old friend to me, and I certainly do not want you to reduce its size.

I suppose under the new postal law the postage will be due at your office, and if you could furnish the *JOURNAL* at the old rate free of postage, I think it would increase its circulation. If this is not practicable, I would be in favor of increasing its size and its price to correspond.

Michigan speaks again:

Concerning the enlargement of the *JOURNAL*, and the advance in price, it seems to me that that course, while it may be desirable to those possessed of a competency, would confine the benefits of the *JOURNAL* to that class. Now, there are many others who would be glad to avail themselves of its pages, and probably they are more needful of the instruction they contain, but every dollar they possess is in demand in half a dozen directions, while they felt that they could hardly afford the three dollars, would give up in despair at four. I have some idea how it is myself. I think I am not mistaken in believing you desire to benefit the masses, and "the greatest good to the greatest number" is, I think, a very good motto.

No premiums. South Boston says:

As far as I can see, I think it would be as well to put the price of the *JOURNAL* as low as you can afford it, and give no premiums.

[On this point permit us to say, our premium goods are obtained at lowest wholesale prices, direct from manufacturers, expressly for the purpose, sometimes at less than cost because of the publicity we give them. They are paid for partly in cash and partly in advertising. If we receive a trifle more than club rates, we do not lose, while the agent, or getter-up of the club, realizes something handsome for his time and services. For these reasons we continue the premiums, for a list of which see circular.]

New Haven—precincts of venerable Yale—speaks through a fair hand and a loving heart:

As the months pass by bringing with each one the dear old *JOURNAL*, my gratitude increases. How can I

say enough to show my appreciation, and the pleasure and benefit I have in reading its fair pages? Each one seems to be better than the other. I do not see how you can make it better in every department, or put it in better shape to meet the wants of the people.

North Carolina speaks through Mr. G. E. T.:

As you desire an honest expression of opinion as to the future size of the *JOURNAL*, I give you mine as follows, viz.: Either continue its present size as a semi-monthly, or enlarge it as a monthly. No person who takes an appreciable interest in Phrenology can afford to be without your *JOURNAL*, and, unfortunately, yours is the only magazine published in this country devoted to this noble science. We get but little light upon this subject except through you. More information for more money is what I crave.

The publishing department is strictly a matter of dollars and cents, and if to your advantage to take a few advertisements, I shall read them, as nothing escapes me contained within its covers. In the *Science of Health* I consider the advertisements advantageous, as they direct where to purchase our daily bread. I should be pleased to tell you how highly I prize both of your *Journals*, but your time is too precious to devote to reading of opinions, etc. I will add, however, that since I have been a reader of the *Science of Health* I have endeavored to conform to its teachings, and am to-day much healthier than when taking the poisons of the drug M.D.'s. I hope and am quite confident that your subscribers will favor more reading matter, and be anxious to pay an honest price for it. I prefer the extra information in my brain to the difference in my bank account.

A Hoosier would have more. He says:

I should prefer to have it increased in size and price rather than diminished. But suit your own convenience, and that will suit me, as it has for the last ten years; and as long as you adhere to the right and denounce the wrong, count me in.

A Texan says:

Increase the size of the *JOURNAL*. Why should such a valuable publication be diminished? For some years past I have taken a great interest in Phrenology. Your *JOURNAL* is always gladly welcomed by yours, truly.

J. I. writes from Lexington:

I vote for expansion. Be it larger or smaller, I shall adhere to it with the firmness displayed by that animal pictured on your symbolical head. If you enlarge it, you strengthen it; reduce it, you weaken it. In either case, I pledge one new subscriber.

Iowa:

After they all tell you their opinion, I believe you will need to decide for yourself. Although I am anxious to hear of the success of this science which is climbing up, to hold out to the famishing families of earth the thing which they need, I know that I have nothing important to speak of.

Lead, lead to the fountain of living waters.

Truly, the "world is sick," and we have hewn our ourselves out cisterns—broken cisterns.

The *JOURNAL* grows in grace. God guides it. May it advance in the Redeemer's name, redeeming an innumerable number, not fearing to lose apparent dignity for the sake of Christ. Yours, in faith, FERRIE BALLARD.

"My wife and I" are agreed. A loving couple from Illinois write:

My wife says it is just as good as can be now, and I agree with her. Don't change size or price. If your subscription list increase so as to warrant it, put in new departments. Wish it was a weekly. I (we) vote "let well enough alone."

Colorado speaks briefly and emphatically:

Shall the size of the PHRENOLOGICAL *JOURNAL* be changed? No. What about the reading matter? Give us plenty of Phrenology, with illustrations, so we can see ourselves as others see us.

A Pennsylvanian says, among other things of practical purport:

Let everything stand upon its own merits, and your *JOURNAL* can better afford it than any other published. It contains no dead matter, always loaded with fresh matter for the mind. It would require some space to give you all the advantages I have derived personally from your *JOURNAL*.

The State of Maine casts several votes, and all one way. We quote the briefest, from Rockland: Why not "let well enough alone?" It is very neatly gotten up.

PRESENT STATE OF THE CASE.

As now advised, we do not feel justified in enlarging and putting up the price. Nor does it seem best to reduce the size or price. We suggest, for the consideration of all concerned that, when our national finances shall have been settled, so that we may know exactly where we stand as to the prices of paper, printing, and other commodities; and when we shall have an assured circulation say of 50,000 copies, that we will enlarge to the size of the best \$4 magazine *without* increasing the price! But, all things considered, we shall keep right on at present rates, improving as we can. If the friends of the JOURNAL so elect and decide on its future enlargement, why not have the period of this event date with the Centennial year 1876? Then we—our Republic—will have attained its hundredth year! Give us the 50,000 subscribers in 1875—not a difficult thing—and we will furnish an enlarged magazine at the present price, \$3 a year.

"Oh, that will be joyful."

WISDOM.

NONE so thoroughly over-estimate as they who over-estimate themselves.—*Frederic R. Marvin.*

No man can learn what he has not preparation for learning, however near to his eyes is the object.—*Emerson.*

It is better to have no opinion of God at all than such an opinion as is unworthy of Him; for the one is unbelief and the other is contumely.—*Bacon.*

WHEN some die, all that can be said of them is, "They lived in splendid style, were driven in splendid equipage, and died, leaving to their heirs a splendid fortune."

LET thy thoughts be such to thyself as thou art not ashamed to have God know them, and that, if it should be suddenly asked, "What thou thinkest on," thou mightest not blush to tell.—*Jeremy Taylor.*

PETER COOPER'S "recipe by which he has preserved his youth," is to give always a friendly welcome to new ideas, never to feel too old to learn, never to lose faith in human nature, or to withhold his hand from aiding new enterprises.

THOUGHTFULNESS for others, generosity, modesty, and self-respect are the qualities which make a real gentleman or lady, as distinguished from the veneered article which commonly goes by that name.—*Prof. Huxley.*

"I NEVER complained of my condition but once," said an old man, "when my feet were bare, and I had no money to buy shoes; but I met with a man *without* feet, and I became content."

THE sure foundations of the State are laid in knowledge, not in ignorance; and every sneer at education, at culture, at book-learning, which is the recorded wisdom of the experience of mankind, is the demagogue's sneer at intelligent liberty, inviting national degeneracy and ruin.—*George William Curtis.*

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

A FOP, in company, wanting his servant, called out, "Where's that blockhead of mine?" "On your shoulders, sir," said a lady.

WHEN you hear a man say the world owes him a living, don't leave any movable articles, particularly any bank bills, lying around loose.

A NEW style of boys' trowsers has been invented in Boston, with a copper seat, sheet-iron knees, riveted down in the seams, and water-proof pockets, to hold broken eggs.

RECIPE FOR MAKING A ROW.—Walk along the pavement of a crowded thoroughfare with a ladder on your shoulder, and turn around every few minutes to see if anybody is making faces at you.

A LITTLE fellow, five or six years old, who had been wearing undershirts much too small for him, was one day, after having been washed, put into a garment as much too large as the others had been too small. Our six-year-old shrugged his shoulders, shook himself, walked around, and finally burst out with, "Ma, I do feel awful lonesome in this shirt."

AN energetic young Irishman, who has been reported as among the "fatally injured" by a railroad accident, and afterward reported as not among that unfortunate company, writes indignantly to the local editor, saying: "I tell you I was among the fatally injured, but the reason I didn't die was, because I'm always temperate in my living, and have a splendid constitution naturally."

THIS is the way an exchange records the marriage of Mr. Hay to Miss Stone:

"All flesh is grass; grass should be cured, they say,"

Said fair Miss Stone: "I'll turn myself to Hay." So Stone is turned to Hay—queer transmutation, Excelling any alchemist's creation; Yet still another change is coming, maybe, When Hay will turn to rock—to rock the baby!

THEY LAUGHED.—At a recent English wedding, while the bridal party was kneeling around the chancel, the groomsman poked the groom in the side; he laughed, and so did the bridesmaid, and the clergyman retired in high dudgeon from the church; twelve o'clock came, after which no marriages are performed; so they had to go home and spend twenty-four hours cultivating a serious frame of mind.

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

MY VISIT TO THE SUN; or, Critical Essays on Physics, Metaphysics, and Ethics. By Lawrence S. Benson, author of "Benson's Geometry." Vol. I., Physics, Electrotyped Edition. Octavo, pp. 164; tinted paper; muslin. Price, \$2.25. New York: James S. Burnton.

There is both imagination and keen, critical intellect with real scholarship in this production. It is not to be supposed that common minds will or can accept and apply the author's logic, for it is beyond their comprehension. That his essays will provoke thought and discussion is inevitable, for he aims at truth, and will pursue this aim, regardless of consequences. Here is the brave motto under which he investigates and writes:

"I am touching subjects consecrated by long reverence, the ripe thought and the earnest conviction of the most illustrious and experienced thinkers known in the history of man; but with all due respect for the treasured Wisdom of ages, gathered, condensed, and utilized by great patience and indefatigable industry, I must say, it will amount to nought, if it shrinks from the wand of Truth; or if, from this pretext or that prejudice, it avoids the light of inquiry."

THE AHN-HENN SERIES OF FRENCH SCHOOL BOOKS. 1. French Primer. Price, 25 cts. 2. Method: First Course. Price, 40 cts.; Key to do., 25 cts. 3. Method: Second Course, 60 cts.; Key, 25 cts. 4. Reading Charts, 20 plates, and Hand-book, \$1. Published by E. Steiger, New York.

The excellence of the Ahn method of acquiring a knowledge of the French and German languages is widely known, and needs no confirmation from us. Dr. Henn, in the series of French text-books above specified, has reduced the Ahn method to the simplest terms, and made the acquisition of that polite language a matter of comparative ease for the diligent student. The principles which have been observed in the preparation of these compact little volumes are to present the main features of the language first, and gradually to unfold the details of grammar and construction as they become necessary to its thorough comprehension; in every stage of the work to furnish abundant exercises for the practice of converting French into English, or English into French, and so to familiarize the student gradually with the technicalities of the foreign language. The pronunciation, that bugbear of all learners of French, is so nicely analyzed in the Primer that one gets the "hang" of it almost imperceptibly, and in the very outset; as French words are the illustrations, he obtains a good vocabulary as a foundation for further study.

Candidly recognizing the fact, however, that no

text-book can impart a knowledge of the niceties of French pronunciation, the Ahn-Henn system supposes the aid of a competent teacher, and omits only from its written instructions such matters as can be explained or indicated by the teacher's voice.

The Reading Charts and Hand-book, a new feature in language instruction, are of great value to teachers, especially in the class, and should obtain general favor.

GERMAN TEXT-BOOKS. From the same publisher we have received the following: Ahn's Rudiments of the German Language. By Dr. P. Henn. Price, 65 cts.; Key, 25 cts. Ahn-Henn's German Reading Charts, and Hand-book, 25 plates, \$1.

What has been said with regard to the French series, applies also to the Ahn-Henn text-books of the German language, and it may be added that the increasing use and popularity of the German language in the United States are effectually met and supplemented by these admirable manuals.

THE MOTHER'S HYGIENIC HAND-BOOK, for the Normal Development and Training of Women and Children, and the Treatment of their Diseases with Hygienic Agencies. By R. T. Trall, M.D. 12mo; cloth; pp. 186. Price, fine edition, \$1.25; plain edition, \$1. S. R. Wells, Publisher, 389 Broadway, New York.

Under this title we have the pleasure of presenting to the public another important and long-needed work—a work which we can commend to every family as a *desideratum*. Works on Maternity, Childhood, and Diseases of Women and Children, are common enough; but, unfortunately, with nearly all of them, the drug medication is so disproportionate to the hygiene recommended that, on the whole, they are worse than useless to mothers who do not choose to poison themselves nor their children because they are sick. The present work has no taint of the drug shop. The author has crowded within the space of two hundred pages more sound instruction and really useful information than can be found on the subjects treated of in a whole medical library, with much knowledge not to be found in any other work.

The work covers the whole ground of womanhood in the relations of wife and mother. It gives ample instructions in relation to ante-natal conditions, management during the periods of gestation, parturition, and nursing, with very full and complete directions for treating, with hygienic agencies alone, all of the ailments, accidents, and emergencies of infancy and childhood. Indeed, it traces the primordial germ from its inception through all the stages of development and growth to mature life and vigorous health, pointing out, all along, the prevalent errors of society and the medical profession, and indicating the pathway and means for "training up a child in the way it should go," while ever preserving the health of mothers.

It is certainly the cream of medical literature on the subjects of which it treats, embracing, in con-

cise and intelligible language, all that pertains to the nursery, from the clothing, diet, and playthings of infantile humanity, to the long catalogue of diseases, injuries, poisonings, etc., to which infants and children are liable. We commend it earnestly to every mother who values health for herself and normal offspring, with the assurance that every page and every sentence is chaste and unobjectionable in matter and manner, and replete with the instruction which every woman should possess.

A TALE OF THE SEA, Sonnets, and Other Poems. By James Howell. 16mo; cloth; pp. 204. London: Henry S. King & Co., Publishers.

Among the numerous collections of verses from the pens of writers little known to the great reading world which have been published during the past year or two, none has given us more pleasure and more real instruction than James Howell's. The collection is made up of pieces dating as far back as 1836, when the author was almost young enough to "lisp in numbers," and the ascription then uttered to the "land of his fathers" has all the warmth of a young and enthusiastic Briton. The "Tale of the Sea," written in 1840, is rife with youthful freshness and spirit, here and there a verse or line breathing an unexpected depth of philosophy. In many of the shorter poems there are passages of much power and sweetness. Such, for instance, as "Springtime," "A Plea for the Poor," "Mary," "A South Down Sketch," have many admirable word-pictures of sentiment and scene. Old principles take new shape and breathe a quickened energy under such strong handling as this, in the sonnet "To Wentworth Holworthy, Esq.:"

"The world has great and good men still alive,
Who do their work in silence, watch and pray
For that blessed time when truth shall reign for
aye,

And love be God's rich doer—souls that strive
Against their lower nature, and derive
Help from above their passions to allay.
Of those who conquer self, God is the stay."

We find here and there thoughts and allusions which make it evident that Mr. Howell is not unfamiliar with the tenets of Phrenology. For instance, in the "Epistle to Mark Antony Lower," he inquires—

* * * * "Your lean, high-headed writers,
With nerves and brains refined, all purely mental,
Why in this cat-and-dog life are they sent all?"

And answers—

"Mediums of thought to be; spirit to give;
To leaven matter; make it think and live;
To purge the surging mass; to deaden sin—
Lest all should stagnate and corrupt within."

TIM ORTON, and other Poems. By Luke Revere. 12mo, pp. 20; paper. New York: Baker & Godwin, Printers. Many good thoughts expressed in pleasant phrase.

THE WEST & LEE GAME AND PRINTING Co's Illustrated Catalogue of Chivalrie, with The Rules of the game, Patented October 21, 1873. Worcester, Mass.

The new lawn game of Chivilrie is an American invention, and contains a variety of features which render it more interesting than even popular Croquet. The apparatus of the game, when set out upon the grassy field, presents a picturesque appearance. The catalogue describes several sets of the game, whose cost varies from \$8 to \$1,000, according to the materials used, and the finish.

IN PRESS.—**HEART ECHOES**, a new volume of poems, by Mrs. Helen A. Mann (Nellie A. Mann), is now in course of preparation, and will be ready for the trade by December. The author is well known in the West as a composer of verses which have won their way to the heart by their sweetness and graphic portrayal of the best emotions and sentiments. The collection will number about one hundred and thirty subjects, and be bound in neat and attractive styles. Price, in cloth, plain, \$1; in morocco, gilt, \$1.50. S. R. Wells, publisher.

THE PROTESTANT is the name of a magazine recently commenced to be published monthly, at \$1.50—gold—a year, by F. E. Grafton, 182 St. James Street, Montreal, Canada. Here is a table of contents of No. 1: Ultramontaniam; Oka, Lake of Two Mountains; Infidelity; Ritualism; Facts and Figures for Protestants; A Warning to American Parents; The Protestant Needed in Canada; A Word to Protestants; Victor Hugo on Romish Education; The Pope's Picture in the Vatican; The Roman Catholic Political Programme; Address of the Church Association of Toronto. Protestants, Roman Catholics, Hebrews, Mormons, Shakers, Pagans, etc., are watching each other with a view, we suppose, to see who shall do the most good in the world. The PHRENOLOGICAL JOURNAL will examine all their heads, and state what the differences are, and who is most—wrong.

THE SECOND ANNUAL REPORT of the Board of Health of the City of Boston, which has lately been sent us, contains much interesting information with regard to the many sanitary measures set on foot for the improvement of the health of the people of Boston. The facts gleaned by inspectors with regard to epidemics, infant mortality, sewerage, drainage, unwholesome food, burning fluids, adulterated beverages, chemicals, impure and poisonous preparations for the hair and skin, candies, etc., should be known everywhere. The method taken by the Boston Board for putting Bostonians on their guard against the unscrupulous manufactures of noxious articles for use in the preparation of food, is an excellent one; but no severity could be too great to stop their lawless and murderous business. The inspection of liquors does not appear to have been very thorough, however.

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[WHOLE No. 432



JOHN S. BENDER, OF INDIANA.

THE first thing which strikes the observer on looking at this portrait is, that the original has a fine-grained organization; that he is susceptible and impressible; that his feelings are keen and his thoughts clear. There are evidences of health as well as of

fineness, of power, endurance, and the basis for earnest effort. The reader will observe that the head rises high from the opening of the ear; it is not one of those low, story-and-a-half houses, but it is amply developed in the top—massiveness is the word which describes that development.

The height of the head from the opening of the ear indicates three or four very influential organs. The first is Firmness, which gives strength, stability, unbending determination; the next is Conscientiousness, or the love of justice, duty, and morality; another is Hope, which gives him zeal, expectation, ardor in that which he believes to be right and feasible. He also has large Self-Esteem, giving dignity and ability to poise himself upon his own center, hence he is not tremulous in view of responsibility, but meets the requisitions of duty as matters of course, and as though success were assured.

He has force of character; the developments of Combativeness and Destructiveness are sufficient to make him effective in his efforts; he can grapple with opposition if necessary when met with in the way of duty. He has a good deal of social strength—affection, friendship, love. We judge that his Inhabitiveness is decidedly strong; hence he is not only fond of his own home, but of his neighborhood, his State, and his nation.

His religious elements are strongly marked; he has Veneration for whatever is sacred, sympathy for the poor, and faith in a higher life, although he is little inclined to accept the fanciful and wonderful in doctrine or dogma. The great central, moral, and religious truths come home to him with force, and help to give tone and elevation to his character. He evidently inherits enough of his mother to exhibit her intuitive readiness of thought, her power to reach results in thought and observation very quickly. His first impressions are his best.

He has an excellent memory, being able to

recall with readiness almost everything he has once learned. His Language is large enough to make him an easy and effective speaker. His sharpness of practical intellect, his excellent memory and analytical power, enable him to condense a great deal of truth into crisp sentences; he will say as much in twenty minutes as many an able man can in an hour and twenty minutes, because he naturally drives right onward to the truth without stopping to throw in apologetic or other oratorical paragraphs.

He has much force of character in the direction of dignity, morality, and uprightness, and when he thinks himself in the right he is exceedingly strong, sometimes almost audacious in the fervor and self-reliance which are incorporated into his words and acts.

The following sketch of Mr. Bender's career was furnished by Mr. R. D. Utter:

The subject of this sketch was born on the 26th of January, 1827, near Newville, Cumberland County, Pennsylvania. His parents, though poor, were industrious and honorable people. At the age of six he was enrolled as a "scholar" in the village school; a good school it may have been for the times, but "kept" only in the winter season, when the majority of the attending scholars could be conveniently spared from the duties of the farm or the shop. Of such advantages as this school afforded, he had the privilege of availing himself until he had rounded his tenth year. His father having about this time removed to Ohio, and engaged in the milling business, John soon made himself so useful about the mill that his services could not well be dispensed with.

His school-days were seemingly ended; but such was his application to private study that in the course of a few years he had really made himself the master of a first-class common-school education. Meanwhile, he had formed those habits of industry which have served him so well through all his subsequent career.

In 1846 his father settled upon a farm in Marshall County, Indiana, and John's services were needed in this new field; but as farming did not seem to suit his tastes or in-

clinations, his father wisely permitted him to re-enter upon his trade as miller. After a period of faithful service in a mill at North Liberty, he stepped into a seminary at South Bend to enroll his name as a student. Here, notwithstanding ill-health and many other discouragements, relying solely upon his own resources for support, he succeeded in completing a comparatively liberal course in English, besides gaining a knowledge of the elements of classic literature.

His academic career finished, he successfully engaged for a few years in the pursuit of a land surveyor; then laying aside his compass and level, he served two terms as the clerk and auditor of Stark County, one by appointment and one by election. Afterward he entered upon the practice of law.

He now resides, and has for several years resided, in Plymouth, Marshall County, Indiana, a successful and trusted lawyer and an honored citizen.

In 1870 he was a candidate for Representa-

tive in the State Legislature, and in the last presidential contest he was a contingent elector on the Republican side for the 13th Congressional District. Meanwhile he edited the *Marshall County Republican*, of which he was also the proprietor.

In politics, as in everything else, he has maintained the reputation of an honest man. Although never an office-seeker, he has always taken a lively interest in political affairs. His motto has been, "Men as well as principles, but principles rather than men." He acts with no party as a partisan, but with the independence of a patriot.

The following quotation from one of his public speeches shows the temper of his mind: "I would rather occupy the most humble station in life, knowing myself to stand upon a platform of sound principles, than to accept, on conditions which my conscience could not approve, the highest office in the land. Political success is too costly if it require the sacrifice of principle."

CHARACTER THREE-FOLD.

A MAN may have a large brain, and manifest strength of character, and yet be unbalanced and partial in his developments and manifestations. People have supposed that if a man wear a large hat he must needs be a man of talent, and exhibit, as well, energy and moral sentiment. A man may have a large brain developed in the frontal portion mainly, giving him a strong intellect, but he may have very weak social and moral dispositions. Another may wear the same size of hat, but his head being mainly developed behind the ears, he shows propensity, sociability, impulse, and affection. Another may be developed largely in the top-head, and not be remarkable for intelligence, which comes from the forehead; or for force, which comes from the side-head; or for sociability, which comes from the back-head; but he has dignity, morality, stability, and devotional feeling in a high degree, because the top-head, in which the organs of these sentiments are located, is largely developed. We occasionally find a head that is contracted and narrow in front, the intellect

pinched and diminutive; it may be also small and flattened at the back; such a man will be cold, dry, and distant. He may live a kind of hermit life, be selfish and sullen, and regard every man as his rival. His head will be found to be broad, rounded, and full at the sides, and his brain thus not only measures amply, but weighs rather heavily. This form of head is often seen among the Indians. We have in our office a group of pugilists—fifty-seven in number—and this is the characteristic formation of their heads: rather high at the crown, very broad above and about the ears. But in some cases the heads are contracted in front, and many of them also in the rear.

The general classification of character is three-fold. We place the pugilists referred to in the category of force and selfishness. The traits of character which are abused in the pugilists are legitimately and appropriately employed by men who are engaged in labor which requires courage, fortitude, and force. The men who run the locomotive, who battle with the ocean on ship-board, who

follow mining operations, or the construction of roads, docks, and bridges, can utilize these force-elements legitimately, and if guided by intelligence, their ministration is laudable and beneficent.

The physical faculties or propensities have primary and necessary position in human character. They tend to look after the wants of the body, to secure its common needs, to wrench from the rude grasp of uncultured nature the few material things that the body requires.

The men who live in the middle region of their brain mainly, are those who deal with things of sense, with the ruder forms of life and labor.

Those who are developed less in the realm of force and selfishness, and find their strength chiefly in the intellectual development, constitute another class of humanity. Those who have the anterior lobes of the brain long, do the thinking, the planning, and the inventing in all great enterprises. There will be found one or two in a hundred who live by their intellect; their power is thus centered. Invention, prophetic outreach of thought, power to plan for hundreds or thousands of workers, give them their position, and open to them a wide field of effort and usefulness.

Eli Whitney invented the cotton-gin, an intellectual effort, and then laid aside his coat to construct the first machine. He taught the world a lesson, and opened to it a mine richer than those of Golconda. The happy moment when his great invention dawned upon his intellect opened a cycle of prosperity, wealth, and utility for the human race. Such germ-thoughts are the great factors of the world's prosperity and progress.

Intellect, of course, governs physical power in the human organization, even as a man's intelligence presides over the steamship that plows the stormy midnight ocean, or controls the hammers, spindles, and looms of a great factory.

The third great element in character is sentiment. This embraces the moral nature, which gives man special superiority over the lower animals, and embraces integrity, justice, faith, devotion, kindness, imagination, and that hopeful prophecy of the soul which enables him to live in the future of the

present life, and to yearn for the life immortal. There are men who are so destitute of this element as rarely to exhibit its influence. They live for the body, for the present life, and for the lower forms of joy and achievement. They are intelligent animals, more powerful than the brutes simply because more knowing, but they lack those lofty out-reaches of thought, sentiment, and affection which give to man his likeness to his Maker.

The harmony and combination of these three great characteristics of humanity, namely, intellect, propensity, and sentiment, make up the strength and beauty and the glory of human life. Each is needed to complete the character. Any considerable excess or deficiency in either department warps the character and mars the life. When, by fortunate coincidence, all the faculties are harmoniously developed and strong, we have nobility of character—a man in the image of his God. That civilization which tends mainly to the development of physical power, secular wealth, and scientific wisdom, come short of fulfilling its proper mission. The superior culture of the moral sentiments is not likely to become abnormal in our day. We have more to fear from the increase of physical power and intelligence, without the corresponding increase of morality and virtue. We hail with joy all secular developments and progress, but we look anxiously for an equal and corresponding development of those moralities and refinements which shall guide man's capabilities to noble ends and to harmony and completeness of character.

THE BRAIN.

THE busy loom of thought! the sacred fire
Of life! how delicate its fairy cells!

Yet there the God in all his mystery dwells!
God of the brush, of music, and the lyre!

What cunning work was woven, when was
wrought

The brain of Shakspeare! what a radiance caught
From heaven, brightened like a living sun

In Milton, when his grand orb shone upon

Our dark and dazzled race! all throbs that run

Over life's myriad, kindled wires are traced

To these fine sources! What a desert waste

Were this rejoicing, radiant earth, instead!

All thought, all joy, all light, all knowledge dead!

This earth, now on and up, moving with pinioned
tread!

A. B. STREET.

Department of Religion and Psychology.

Know,
Without or star, or angel, for their guide,
Who worships God shall find him.—*Young's Night Thoughts.*
The soul, the mother of deep fears, of high hopes infinite;
Of glorious dreams, mysterious tears, of sleepless inner sight.—*Mrs. Hemans.*

SPIRITUAL EVOLUTION.

"I held it truth with him who sings
To one clear harp in divers tones,
That men may rise on stepping-stones
Of their dead selves to higher things."

IN the above heading we include whatever development is not of the physical, and shall endeavor to show that moral, intellectual, and spiritual evolution results from the proper control of the passions, from pain, poverty, ignorance, sense of weakness, doubt, tendency to evil, and, in brief, that all things may be compelled into service in evolving the higher nature of men.

So intimately are good and evil blended in this world, that the knowledge of one presupposes the knowledge of the other. "God doth know that in the day ye eat thereof, then your eyes shall be opened; and ye shall be as gods, knowing good and evil." In the cradle this spiritual evolution should commence. The child who is taught to control his temper, to speak the truth, to bring himself obediently to do the parents' bidding, to eat what is best for his physical well-being, and to go without everything hurtful, has a foundation laid for infinite, upward growth and expansion. The importance of this early training can not be overestimated. The Israelites hold that when a child is old enough to pronounce the name Moses, he can be so thoroughly indoctrinated with Judaism that no after influences can eradicate these early teachings. Christ enunciates the same principle in his repeated injunction, "Feed my lambs." Lacking obedience to this, we see youths no sooner arriving at the age of discretion than they go astray. For want of parental guidance and tuition in directing and restraining their nascent powers within the limits of right action, they are incapable of keeping themselves, having reached maturity, within the prescribed boundaries of

exemplary life, or coming back to them when, by fiery impulse or sudden temptation, they have been swept into paths of evil. This subject of early moral discipline we commend with the utmost earnestness to every father and mother. De Quincey has observed somewhere in his pages that he noticed, after severe illness or pain in his young children, an unusual development of intellectual power. It is doubtless true that pain is a wonderful accessory agent in developing the powers of the soul. This pain may arise from any one of the sources enumerated in our first paragraph, and may be used as a stepping-stone by the aspirant to higher things.

The consciousness of ignorance, which is painful, is the first step to knowledge. The man or woman, of whatever age, satisfied with attainments already made, ceases to make progress, and loses ground. A noble discontent with one's self is an essential element of growth. When coupled with this there is a ceaseless effort to improve to the utmost opportunities offered, there progress is inevitable. Do you look, my young aspirant, with earnest and ardent longings at the moral elevation of a Wesley or an Edwards, at the wondrous achievements of a Cuvier or a Humboldt, at the intellectual height of a Milton or a Newton; do you say, with Themistocles, "The trophies of Miltiades will not let me sleep?" Rejoice because of this unrest, and consider it the pledge of future conquests. Upon the battle-field where the passions in ceaseless conflict wage eternal war, are victories won at once most fearful and glorious. While we live in the body must this warfare last, and though we may from

time to time regard the strife as over, sense will watch its chance and revolt from control. In youth the hot blood of desire, in middle life the fierce appetite for power, or fame, or wealth, in old age the lust of avarice—these all lie in wait to lead us from the right, and in proportion as we turn them into the nutriment of virtue will be the good they may be compelled to work out for us.

There is another part of the moral field where defeat is most disastrous—that where doubt and faith strive for the mastery. In childhood we believe what we are taught, we accept passively the creed of our parents, but as we grow in years some firmer foundation must underlie our belief, and doubt springs its mine beneath our feet.

“—— one indeed I knew

In many a subtle question versed,
Who touched a jarring lyre at first,
But ever strove to make it true;

Perplex in faith, but pure in deeds,
At last he beat his music out.

There lives more faith in honest doubt,
Believe me, than in half the creeds.

He fought his doubts and gathered strength,
He would not make his judgment blind,
He faced the specters of the mind,
And laid them; thus he came at length

To find a stronger faith his own;
And power was with him in the night,
Which makes the darkness and the light,
And dwells not in the light alone,

But in the darkness and the cloud,
As over Sinai's peaks of old,
While Israel made their gods of gold,
Altho' the trumpet blew so loud.”

The foremost champion of the age in science boldly throws down the gauntlet of materialism, and says “there is no God.” “Canst thou, by searching, find out God?” Yet he admits there is a power he can not explain which Faraday, fully his intellectual peer, hesitates not to call Divine. Tyndall frankly admits there is in the human soul wants not satisfied with what meets all the demands of the understanding. Faith is as much a faculty of the soul as reason. “Render therefore unto Cæsar the things that are Cæsar's, and unto God the things that are God's.” Let reason have its own and faith its own. The cultivation of one set of faculties to the exclusion of all others produces inordinate growth

of the one and atrophy or dwarfing of the rest. The man who will take no testimony save that of his sense, will soon be incapable of seeing *anything* with the eye of faith. But every man and every woman who has a soul large enough to furnish a battle-ground for these elements, must go through this conflict, must study and think for themselves, weighing evidence, sounding depths, balancing arguments, giving to reason the things that are reason's, and to faith the things that are faith's. Though in every age there have been infidels and skeptics, the brightest names upon the roll of literature, of art, of science, are of men who embraced with humility the teachings of the sacred Scriptures and accepted the record therein given by God of Himself.

From all these conflicts with self and within self, there will be evolved a hearty feeling of sympathy with universal humanity. Only he that has wrestled with poverty can enter into the pangs that afflict so large a proportion of the race. “The poor we have always with us.” He that has been tossed upon the seas of doubt, knows how to be lenient toward the honest skeptic, and hopeful of his final faith. He that has felt within his own soul the thundering surges of passion, the clamor of appetite, the fierce revolt against duty—he will be compassionate toward his erring brother, and pitiful to all tried and tempted ones. Charity!—it is the crowning grace of the purified soul; the last perfection evolved from the refined and chastened heart.

If what we have said is true, who shall repine because of poverty, of pain, of ignorance, of doubt, of temptation? These all are ministers of grace to him who can improve their teachings. Poverty becomes a stimulus to exertion, and at the same time a bond of sympathy with humanity. Pain, of whatever sort, may be so used that all the intellectual and spiritual faculties shall be quickened and intensified in their action. Within what four years of his life has Henry Ward Beecher done so much, so various, and so noble work as in the last four? The full force of the moral pain he suffered was turned upon the work he has had in hand, and the world wonders at his achievements. We may not invoke, as an aid, the ministry of

pain, but if it comes, he has taught us how it may be employed to the furtherance of great deeds.

Bereavement, too, has its benedictions. There are many things we never read clearly till we read them through our tears. In what rainbow tints does the law of love, the virtue of forbearance, the sweetness of courtesy, the loving another better than one's self, appear when seen through this crystal medium. Beneath the sod that covers our loved we bury also malice, unkindness, harsh criticisms, envy, pride, and all uncharitableness, and go thence knowing how to weep with those that weep, and point them to the stars that in the night of our grief have shined down from the everlasting blue above us.

There may be those who can write on this subject and not mention Him who is the hope of the Christian world. But we who believe in Him as both human and divine, find in His teachings fundamental support and in-

finite inspiration. Does sense clamor for indulgence? we may say with him, Man shall not live by bread alone. It is *profitable* that any and every member of the body shall perish, if only thus the soul shall be kept unsullied. Can language be more intense than this? We walk in darkness and in sorrow unto death, but for the joy that shall ultimately crown all our anguish, we can say with him, "Thy will be done."

This article is written in the interest of all earnest aspirants toward self-development, whether they be Darwinians or otherwise, whether skeptics or believers, young or old. It is written, not from the stand-point of science or religion, of art or literature, but embracing them all from the stand-point of experience, and with the earnest desire that those struggling with spiritual difficulties, of whatever sort, may find some thought here that will aid them in the upward climbings.

L.

PSYCHOLOGY—OBSERVATIONS LOOKING TO A NEW SYSTEM.

THE words of Coleridge in his "Religious Musings," in which, after Milton and Newton, he speaks of Hartley as the one

"Of mortal kind

Wisest, the first who marked the ideal tribes
Up the fine fibers of the sentient brain,"

apply, no doubt, with equal force to Professor Ferrier, of London, whose conclusions, drawn from electrical excitation of the cerebral convolutions, bid fair to settle the several issues left unsettled by Gall, Spurzheim, and other accomplished observers. It is rumored that Professor Carpenter, the great English physiologist, has already given his adhesion to Phrenology, as established beyond dissent by Ferrier's experiments. Men—medical men—of equal importance in the scientific world, have also announced their acceptance of the general doctrines of Phrenology, while dissenting from its map of the faculties and their distribution; and, in general, Phrenology takes its place as the psychological system of the future. The last quarter of the nineteenth century is likely to see its triumph over the antiquated metaphysical systems still taught in American colleges—a consummation the more devoutly to

be wished in that graduates are now compelled to unlearn all they have learned in this field before entering upon any real scientific progress. But the Phrenology of the future will, I apprehend, have to abandon not a few of the minor positions now held by exponents of the system; nor am I convinced that Professor Ferrier's experiments established all its leading positions so firmly as I was at first inclined to admit, and did admit in a recent paper in the PHRENOLOGICAL JOURNAL. There is consolation, however, in having good company in jumping at conclusions, even though the solution should carry one a trifle beyond the proper limits of induction, as I am persuaded that it has in this instance. *Cum Platonem errare*, etc. It is better to err with Plato than to be right with the sophists, and having erred with Plato (Dr. Carpenter), I ought, no doubt, to be therewith content. Still, I am not prepared to put myself on record as accepting the conclusion that these experiments verify the main propositions of Phrenology, except conditionally, and with sundry reservations to which I shall presently advert.

I have, let me premise, carefully verified

the experiments of Professor Ferrier during my residence in the country, by means of heat currents, which answer equally well with electrical excitation, and are in some respects superior in their demonstration. I may add that there is no special need of removing the skull-cap in experiments with electricity, and that, though the agent is a different one, to apply the tip of the finger to different quarters of the cranium of a person in mesmeric slumber results in the same muscular phenomena described by the English experimentalist, as, with the assistance of a professional mesmerist, I have been able to prove Dr. Ferrier's conclusions in detail, and to verify Dr. Flint's investigations concerning the functions of the cerebellum. Thus, by placing the tips of the fingers on the points mapped in Phrenology as Amativeness, in the instance of a person in mesmeric slumber, I have been able to induce the physical phenomena associated with sexual passion.

But, before proceeding with the discussion, let me present a summary of the conclusions of Professor Ferrier and Dr. Flint in so far as they bear upon the issue between Phrenology and cerebralism in general:

1. The cerebellum acts as a nerve-center presiding over equilibration and general muscular co-ordination, and has its nervous connection with the muscular system through the posterior white column of the spinal cord.

2. The muscles concerned in articulation are co-ordinated by a nerve-center occupying a portion of the left anterior lobe of the cerebrum.

3. The anterior lobes of the cerebrum are the principal centers of voluntary motion and of the active outward manifestation of intelligence, co-ordinating the muscles of the face and those concerned in expression.

4. The individual convolutions are separate and distinct centers, and in certain definite groups of convolutions, or in the corresponding regions in non-convolute brains, are situated centers for the various movements of the eyelids, the face, the mouth and tongue, the ears, the neck, the hands and feet, and the tail. The several centers are highly differentiated, or the reverse, corresponding with the habits of the animal.

5. The action of the hemispheres of the brain is generally crossed, but certain move-

ments of the mouth, tongue, and neck are bilaterally co-ordinated from the cerebral hemispheres.

6. The corpora striata have a crossed action, and co-ordinate the lateral muscles of the body.

7. The optic lobes, besides being concerned with vision and the movements of the iris, are centers for the exterior muscles of the head, trunk, and legs. (This is Professor Ferrier's phraseology. My own conclusions, from repetition of the experiments, is that they co-ordinate the special muscles involved in the act of turning. That, therefore, seeing and turning to see are parts of the action of the same nerve-centers.)

In the course of my verification of these propositions, cursory as they have been, I have, I think, added one important fact to the general array, formidable as it is; and that is, that the centers of the anterior lobes of the cerebrum have their connection with the general muscular system through the anterior white column of the spinal cord. If, for example, a cat be put under anæsthesia, and the anterior column of the cord be severed, it is impossible to affect the general muscular system by electrical excitation of the anterior portion of the brain. On the other hand, if the posterior and middle columns be severed, without injury to the frontal cord, excitation of the cerebrum has its usual effect of exciting muscular contractility. It is true that this proposition would naturally be concluded from the dissection of a brain, for the anterior lobes of the cerebrum are directly connected with the two pyramidal bodies, and the pyramidal bodies are but continuations of the two white frontal threads of the spinal cord; but it is none the less necessary in positive investigation that it should be verified by experiment, and it is a little singular that Dr. Ferrier should have neglected a point so important.

From these data the reader will be able to form a definite idea of the constitution and distribution of the motor tract—that by which volition acts on the muscular system—and to construct a general map of centers representing the connection between volition and the various departments of muscular activity, from simple locomotion to the complex play of muscles concerned in elocution or in the

interpretation of the drama. Add to this congeries of facts the great fact that the medulla oblongata represents the main nervo-vital center, and the reader is in possession of the important grand divisions of motor anatomy. Beyond this lies a dream-land peopled with a race of guesses; save that Professor Helmholtz has demonstrated that the agent of motor excitation is not electricity, as was once supposed, and as the mesmerists and many of the Spiritualists still maintain—that the rapidity with which nervous excitation is propagated from the brain to the muscles varies from 260 to 292 feet per second, being infinitely below that of electricity, and that the propagation of voluntary impulse along the motor nerves is sensibly accelerated by heat or retarded by cold, being somewhat more rapid in summer than in winter.

How far these investigations support the doctrines of Spurzheim, and verify his views as drawn *a priori* from brain and nervous anatomy, is apparent at a glance. In the main, the great German anatomist was correct, though from the stand-point of comparative anatomy his studies were very defective and unsatisfactory, while from the inductive point of view he was content to leave unverified too many points demanding minute verification. The time will come, however, unless I sadly mistake the tendency of modern investigation, when he will be acknowledged as the founder of scientific psychology, and his discoveries as having marked an era in the history of the science of all sciences most difficult. It will take many years of assiduous and careful experiment, in conjunction with dissections by the hundred, to trace out and unravel the complicated motor network that co-ordinates and determines our activities in life and our relations to its environing facts; but that, when the task is completed, it will substantially vindicate the fame of one so long traduced, none who have kept accurate memoranda of progress during the last ten years will venture to doubt or to deny.

As the first great step in that direction, the discoveries of Dr. Ferrier are, therefore, entitled to more attention than they have yet received, and call for a more microscopic scrutiny than has as yet been accorded them.

It was to be expected that the exponents of the antique metaphysical system of psychology would ignore facts apparently so destructive to their theory; but that psychological essayists in general should have neglected them, is not complimentary to their appreciation of the really valuable.

But it must be conceded that neither Ferrier's investigations nor Flint's are at all conclusive as to the relation of these motor centers to intelligent faculty, nor can they explain the origin of the volition they presume. Thus far, nothing has been gained except an accurate experimental knowledge of certain cogs and pulleys concerned in muscular movements. The primary fact of consciousness has not been accounted for, nor has its relation to the action of these nerve-centers been insinuated or suggested; and it is clear that this blind excitation or action of centers can not be regarded as constituting a faculty in the acceptation of that term necessary in psychology.

On the other hand, it is demonstrated by experiment that the cortex (gray external covering of the brain) is the seat of consciousness. The question that now suggests itself is whether this thinking membrane is itself differentiated into centers, or whether the electrical current passes through this membrane, as a passive conductor, and acts on centers beneath. If the former proposition is true, then the prevalent system of Phrenology needs very little reconstruction. If, on the other hand, the latter represents the true state of the facts, more extensive modifications will be demanded by-and-by, when further details as to the motor tract shall have been settled, and Dr. Carpenter has been a little premature in accepting Phrenology as demonstrated. Mr. Fairfield was also a little premature, in an article submitted to the PHRENOLOGICAL JOURNAL in February last, in giving his adhesion to the same view; for a nerve-center (as, for example, the nerve-center co-ordinating the muscles concerned in articulation) must be connected with consciousness before it can be said to represent faculty. When, for instance, by excitation of particular portions of the cerebellum of a person in mesmeric slumber I produce the physical phenomena of passion, I am, under the latter hypothesis, not at all at liberty to

conclude that the higher emotion is present. In sleep a man may dream of one thing and talk of another thing, thus showing that the nerve-center co-ordinating articulation may act unconsciously, and that—more important still—that nerve-center and the cortex of the brain may act at the same moment, the one in talking, the other in dreaming, without the slightest apparent relation between them. I have heard somnambulists declare, after the most extravagant feats of night-walking, that they had been dreaming all night of things having no relevance to locomotion. How, in what manner, by what magic of sleep, the ordinary relation between consciousness, persistent in dreaming, and action of the nerve-centers co-ordinating physical functions, persistent in somnambulism, is broken, I shall venture to suggest presently. Meanwhile, it is adequate to the purpose to have established the fact that the cortex of the brain may act independently of the nerve-centers, and they independently of the cortex. The joint action of both is essential to the idea of faculty, as understood in psychology. The facts preponderate, therefore, in favor of the opinion that in electrical or other excitation of the surface of the brain the exciting agent is transmitted through the cortex to the ganglia beneath. I doubt, therefore, whether the convolutions are in themselves as significant as Dr. Ferrier seems to think, while I have no doubt that the nerve-centers, implied at certain points in his experiments, are so situated as to be indicated with more or less accuracy by the folds of the superincumbent cortex. One of the main reasons for this will appear in the next paragraph.

If the reader will trouble himself to follow the details of a dissection, he will observe that the medulla oblongata, or upward continuation of the spinal marrow, represents three pairs of bodies, united in a bulb, and resting in a fossa of bone. Of these, the two pyramidal bodies continue the two frontal strands of the spinal cord, and the two restiform bodies continue the two posterior strands. The two olivary bodies, consisting of gray vesicular matter thinly enveloped in white fibers, lie between and partly lateral. Innumerable fibers springing from the restiform bodies and passing through masses of gray matter, curve backward and expand into the

two lobes of the cerebellum, while innumerable pyramidal and olivary fibers, with perhaps a few restiform, curve forward, plunge through gray masses, traverse the great ganglia, and finally expand into the two hemispheres and six lobes of the cerebrum. According to Tiedemann, when these fibers emerge from the ganglia they form a thin membranous fabric, which thickens as existence of the organism proceeds, and is at last doubled upon itself, fold upon fold, thus forming the convolutions. The latter are thus the exponents of cerebral nutrition, accommodating itself to the dimensions of the skull. In diseases of the hydrocephalic type, they are frequently not present at all; and in epilepsy they often disappear altogether. Their number obviously depends upon the volume of the cortex as compared with the dimensions of the skull, and varies somewhat. The general correctness of this view of the origin of the convolutions is demonstrated by the fact that, from its foetal formation to its adult completion, new convolutions mark the expansion and thickening of the cortical membrane. Indeed, it is not difficult to unravel the hemispheres of a brain recently formed, and expand them into membranous fabrics. Thus the sixfold spinal stem blossoms into the complex structure of a human brain.

To follow the evolution of a brain more minutely at this juncture would answer no special purpose; nor is it worth the while to enter into the controversy between Spurzheim and his critics, Tiedemann among them, as to the priority of the different portions of the brain in their order of formation, and the final connection or synthesis of the several parts into an organic whole, since the determination of these questions would have little bearing on the main issue. Those who wish to continue the investigation from this aspect will find a summary of the latest conclusions in Dr. Ecker's "*Cerebral Convolution of Man*"—a valuable though somewhat unsatisfactory work, but one remarkably accurate and excellent in its illustrations. It is enough for the present to have settled the fact that the cortex of the brain and its convolutions, though serving superficially to indicate the situation of given motor-centers, because nearly correspondent with them in

distribution, are not necessarily concerned directly in the differentiation of these centers.

But if, as is indicated by the facts, the white nerves, so far as known, are motor, what is the function of the gray column of the spinal cord, with its two olivary bodies, its final expansion into the cortex, and its related gray vesicular masses distributed at different points? So far as I have experimented, excitation of the gray matter, transmitted by way of the gray strands of the spinal cord, is incapable of eliciting muscular response. Again, the tract of the cerebrum that refuses to respond to the electrical current, consists of gray matter. But, unfortunately, no tests can be applied to determine experimentally whether a given gray tract is sensory, and the utmost that can be demonstrated is that it is not motor. This negative demonstration, which, however, proves a positive, may be applied to one cineritious tract after another with the same result. The conclusion is, therefore, one of rigid induction, that the white nervous mass is motor; while the gray nervous mass is sensory—cognitive—thinking. Thus the psychologist finally eliminates from the complex facts the larger generalization that a man is two men in his nervous organism—a being of gray nerves that thinks, speculates, feels, and longs, and a being of white nerves that co-ordinates and obeys—a life conscious tied to a life unconscious. In this gray nervous specter, coextensive and intimately interwoven with the white, originate our conscious impulses of volition, to be transmitted by the silent and unconscious telegraphy of the white nerves, and translated into muscular contractility; and thus volition is properly a composite operation of nervous organism. In this gray nervous specter—matter's *doppelgänger* of the spiritual—mind is one and indivisible, while, on the other hand, the nerve-centers it controls and co-ordinates form the basis of special aptitudes and faculties. Thus, then, the main propositions of Phrenology are seen to be consistent with the deeper metaphysical and spiritual aspects of human life, while themselves resting securely upon the great facts of anatomy and physiology, and verified by experiment; and thus may be constructed a system of psychology offering the largest verge and scope for spiritual culture and prog-

ress on the one hand, and, on the other, bringing our complex activities within and under the dominion of scientific law. It follows, then, that while the volume of cineritious matter in the brain is the proper measure of intellectual energy, other things being equal, the relative volume of the various motor-centers determines materially, though not inexorably, the direction of this energy; that, furthermore, the relative volume of any given motor-center determines the prominence of any given cerebral tract. For example, if the nerve-center co-ordinating the muscles concerned in articulation is large and highly differentiated, the result is facility and felicity of expression.

Thus, to conclude this part of the argument, it is the mutual relation and interaction that subsists between the nerve-centers, with their definite functions and their different degrees of differentiation, and the membranous though convolute cortex, with its oneness of structure, that render mind unitary in itself and yet many-sided in its aptitudes. Suspend the activity of the cortex, and the phenomenon known as unconscious cerebration ensues. Suspend the action of the nerve-centers, and the phenomenon of trance ensues—a strange, indrawn, sensory dream. So all our dreams are trances, and all our trances dreams, however profoundly spiritual in their attitudes. What, then, is the general conclusion from the data furnished by recent investigations? Briefly, it resolves itself into two propositions:

1. That the main propositions of Phrenology are substantially sound and unquestionable, but that the facts call for some modifications in detail.

2. That now, for the first time in the progress of scientific psychology, is presented a common ground upon which Phrenology and metaphysics may meet and coalesce—that, in other words, the basis for a higher synthesis has been discovered. If metaphysicians like Dr. Porter prefer to blunder on in their mazes of *a priori* nothingness, there is no law to prevent it. If, on the other hand, they wish to add something really valuable to the ontological aspects of the subject, it would be well to study facts a little, with a view to soundness in their primary generalizations, which heretofore have sadly

lacked scientific basis. Spurzheim and Hegel, were they living, might now shake hands as exponents of different aspects of the same system—the former showing its points of contact with physiology, the latter how it dips into the potential and sub-sensible.

These points can not be too strongly insisted upon or too often reiterated, now that the electrical theory of nervous force has been abandoned, leaving the way open for the advent of something more consonant with the great spiritual facts of human life.

The great question at issue—whether certain fundamental intuitions govern our forms of thought, or whether these seemingly radical ideas are experiential in their origin—has been long since practically settled, for it is clear that one generation inherits the culture of another, and that there is something in organization capable of registering and storing up the most subtle spiritual impressions; so that a habit of thought deliberately cultivated by a father may become a form of thought in his son, and pass into a hereditary quality. I am not prepared to say that a man might inherit Greek from his father, but it is doubtful whether one might not inherit the habit of repeating it, so truthfully may it be said that memory is transmitted from organization to organization, and that a son may remember what his father knew, but never told him. Mr. Macnish, in his "Philosophy of Sleep," adduces one instance that belong to this category, and many of our impressions of things as if experienced in another life, have, no doubt, a similar origin. These and similar considerations settle the

question against Mr. Mill. Our idea that a phenomenon must have a cause—in other words, our notion of causation—so far from being a generalization from experience, is a fundamental form of thought incident to our cerebral organization. In brief, certain fundamental intuitions spring directly, and as first forms of activity, from the nature of our organization. This proposition, so strangely overlooked by Mr. Mill, and as yet hardly ventured upon in England, where the prestige of his name is still overshadowing, is one of the necessary postulates alike of Phrenology and of metaphysics; and yet, obvious as it is that organism inherently possesses its primary forms of activity, no issue has been contended more bitterly than this between metaphysics and the sensational theory of Locke; nor has the bearing of the facts been fully apprehended by either party.

I have dwelt thus long upon this one point because it is an exemplar of the many, and shows conclusively that the day has come to attempt a higher synthesis, and to connect the profounder spiritual facts of life, so long denied by materialists, with the facts of physiology. If metaphysicians neglect the opportunity, and still mine on in old shafts, they can not complain that new shafts have not been opened; if materialists repeat old platitudes, they can not assert that they are driven to it by lack of new facts, for the way now lies open to a really profound system of psychology, resting securely upon nervous organization as its basis, but piercing the clouds of heaven with its tapering pencil.

FRANCIS GERRY FAIRFIELD.

A LETTER TO THE DESPONDENT AND DESPAIRING.

MY dear, unhappy, murmuring, discontented, and lamenting friends, who see nothing but wrong, and wreck, and ruin, and the downward course of things—who hear nothing but the solemn, threatening, and desolating cry of woe! woe! woe! reverberating through the length and breadth of God's creation, I have a word to say to you this divine summer day, in the year of our Lord one thousand eight hundred and seventy-four, which I count the grandest year

that ever unfurled its banners to the breeze of civilized worlds, because nearer to the consummation and final triumph of the Eternal plan, which includes all possible and conceivable good. That there are jarring and horrible discords in the air I know; that the war, and tempest, and devouring fire of wicked passions rage with fearful and devastating fury can not be denied; that there is wild chaos, and confusion, and upheaval—more seeming than real—in all the elements of hu-

man life, may not be gainsaid; but through, and over, and absorbing all, the rolling diapason of the universe sounds with majestic sweetness, gathering, rounding, melting in the long sweeps of ages the dissonances of time into perfect and soul-ravishing harmonies.

Because we catch a grating note, or a hoarse, discordant strain, are we to suppose the hymn of the morning stars, the melody of the spheres, jangled and out of tune? Because there is disorder, disobedience, revolt, misrule in the little circle of our day and vision, are we to rashly conclude the Divine power shortened, the Divine purpose and plan baffled, defeated, and overthrown? Because there is sin, and folly, and all imaginable and possible wrong and wickedness in the world, are we therefore to assume that human nature is utterly, totally, and hopelessly depraved and incapable of development and expansion in the graces and virtues of the heavenly life? Surely there must be too much gall and bitterness in the soul that can look abroad through this lovely and silent procession of days, and over this beautiful and perfect creation of the invisible Master's hand, and believe that humanity, the crowning and culminating work of Divine Wisdom, has proven the marplot, disappointment, and failure of the whole grand design. Surely there must be something morally wrong and perverted in the heart that can despair of the latent strength and goodness of its kind, or doubt that under all the waywardness of human sinning, struggles the desire and purpose to be right, to do well. Surely such lack of faith in the providence and power of God, such contempt for, and want of, confidence in the ability and aspiration of the creatures of God, argues a morbid and diseased condition of body and brain, which it is the first duty of all to correct before there may be any possibility of fair and impartial judgment of honest and unprejudiced action in the case of other unfortunate and condemned transgressors of the law.

See to it, oh, ye race of critics, cavilers, judges, and accusers, murmurers and foreboders! that the vexing mote in your brother's eye is not the reflection of the blinding beam in your own; that the terrible and cry-

ing evils you lament and deplore in your fellows are not the phantoms of your own fevered and distempered blood, the hobgoblins of a disordered, overworked, and rebellious stomach. These dismal, doleful, despondent views of human life, of human worth, and power, and principal, indicate a low state of morals, an enfeebled and inactive mind, an impoverished and unsympathetic nature, incapable, under present conditions, of lessening in the smallest degree the ills so vividly sensed, so bitterly bewailed.

Without the inspiration of faith, and the buoyancy of hope uplifting and upbearing the laboring soul, it is vain to preach and to cry, "Repent, repent, and be saved!" to a world that is reckoned lost in sin. For we are not saved by doubts nor despairs. There must be manifest a strong, stirring, persuasive belief in our capabilities to rise and soar and sing with the highest seraph of God, or we remain stuck fast in the slough of our transgressions, unmoved by all the groans and lamentations of those who refuse to put trust in us. If faith without works is dead—as truly the fervent and clear-seeing James declares—even more, could there be degrees in deadness, are works without faith utterly and hopelessly dead—a body without a vivifying spirit, as faith without works is a spirit without a body, impotent each, without the other, to act.

But why, my dear, dying friends—addressing you after your own despairing fashion—why should your hearts be troubled, and your souls weighed down by the awful and oppressive feeling that you have fallen upon evil days, and the poor, old, laboring, sin-ridden, death-stricken, and damned world has rolled to the crack of doom, and is wrapped in the sulphurous smoke of its own internal fires? Have you not heard that the hour is darkest which borders upon the morning? Have you not marked that the clearest, sweetest, deepest, and tenderest calms come after the raging and destructive fury of storms and floods?

What mean these strifes, questionings, contentions, heresies, and schisms, but the seeking and the reaching of hungered and starving souls after the living and satisfying bread of truth? What signify these turnings and

overturnings of law, custom, and precedent? these bold, curious, irreverent peepings and prying into the causes and relations of things? these impatient, restless chafings and plungings under the fretting harness, the galling bit and spur of by-gone ignorance and superstition? these daring assertions of right and liberty to think and act according to the dictates of conscience and reason? What signify these signs but the influx of greater light, the expansion of the spiritual powers, the progress of human thought, the growth of the human race in a broader, freer, purer, higher, more potent and more perfect life? What are these startling revelations, these faint, deprecating acknowledgments, these free, unreserved discussions of hushed and mysterious secrets in nature, but the laying open of long-hidden and festering sores, the breaking out of interior and suppressed evils, the excision of unnatural and troublesome excrescences, by which means the health,

vigor, energy, and elasticity of the diseased social body shall be restored?

Take courage, ye disheartened and dispirited ones, with heads bowed as a bulrush, and strewn with ashes; cease to howl and to weep over ills that are but omens and precursors of good, and give yourselves heart and soul to the work that waits at the hand of every son and daughter of man. I tell you there never was a day so good as this to live and toil in—never a season so full of promise, so rich with fruitage, so white to the harvest, so close to the reward! Rouse from your apathy of discouragement and despair; gird yourselves as true men and women for the business of life, and in place of ceaseless moaning and groaning over the evils that you see, lay hold with the energy of hope, the patience and tenderness of love, the power and calmness of faith, and hasten their transformation to the good desired and designed.

A. M.

Department of Our Social Relations.

Domestic happiness, thou only bliss
Of paradise that has survived the fall!
Thou art the nurse of virtue.

SEX IN EDUCATION; OR, SEX AND EDUCATION.

BY THE SILENT THINKER.

WHICHEVER title I employ I shall be accused of plagiarizing; therefore, I take both, and perhaps the double "anathema maranatha" hurled upon me will stop my thinking forever after. Now, I can not talk any too well on a platform, and as a writer of odes, sonnets, and occasional poems I am a failure; perhaps as a silent on-looker, a thinker by profession, I may achieve success.

Were I explaining arithmetical problems to a boy and a girl, I should use precisely the same illustrations and terms to each, unless the boy were the duller of the two, in which case I should simplify. Sex, in learning the multiplication table, is a factor most pedagogues would ignore; at least they did when I was a child, for Jane Adams was "kept in" as long to learn the sixes as I was. Yet Teacher Jones "let off Mollie Strong

without her algebra problems, but he knew what he was about, for Jones married Mollie the following year, and he was aware that those algebra problems was all he had ahead of her."

As to "sex in education" at the common school, it did not make the spelling lesson any easier for boys than girls, and the best speller stood at the head, whether it wore dresses or trowsers.

We all went to school till we were sixteen, and the only time we noticed any sex in our school was, as I have mentioned, in the case of Mollie Strong. And no scholar paled, sickened, or died from overtaxed brains. The girls were rosy and the boys robust; some of the best scholars were boys, and some others of the best scholars were girls; this was to be accounted for by the fact that

boys inherit their mother's noses and brains quite as frequently as girls inherit their father's brains and noses.

After leaving the common school, half-a-dozen of us, three apiece of each sex, went to Swansdown Academy. We each and all tried our very best to keep up with every other, each and all from our town, and we did it, except Alice Pretty; she soon fell behind and was put back a class; at the same time we noticed she began to get terribly slim, looked as if she would break short off if the wind blew up right pert, and she only went out of doors upon sunny days, because her father requested Madam Rainproof to excuse his daughter from walking whenever the weather was at all inclement—but the goodies, the sweets she had from home, how we used to run to hold the “old Squire's” horse, and carry in the boxes, because we always had a taste!

I've since found out what made Alice get so slim. It was a sort of patent squeezing brake girls put on when they find their good health and buoyant spirits make them appear vulgarly strong and large; it takes the vim all out of them directly, and then you begin to notice their sex in their education.

The two other girls studied Greek and Latin, and ate roast beef and potatoes with the best of us, and when we all graduated, the Faculty said they ranked highest in the class, but it would excite so much remark that he should not give them the honors, and of course it did not grieve me much, as by that means I had the Valedictory and my chum made the opening bow. When the President gave the diplomas, we boys marched up and received them from his own hand, but he handed the girl's parchments to a Prof.,

who extended them languidly and gracefully to another Prof., who handed them as a matter of small importance to the boys, who finally passed them into the girls' hands. The girls received them with deep gratitude, where they modestly sat, below the stage, out of sight of the crowd who were thus prevented from gazing immodestly upon their virgin countenances.

After this we separated; it would be too second-classy to pursue our education any farther together, so chum and I went to Yale. Our old governors had to rake and scrape to keep us there, the “scrape” chum and I did not make it any easier for them, I assure you. Joe Blake went to one of the cheap, new colleges—in fact, it was one of those mixed ones where the girls went. To be sure, they had just as thorough a curriculum and did not “haze” Freshmen, and Joe turned out a scholar and a gentleman, but I never regretted being a Yalite. It gives a fellow a sort of *eclat* to attend one of those venerable, long-established institutions; it's like belonging to a good, old family, even if you do happen to be a blockhead or a scapegrace.

As to the girls, they graduated with honor, and one is now Joe's wife, and one married Chum. They are both women's righters, but of the milder type, who do not hold the men of to-day directly responsible for the accumulated wrong or oppression of ages; and as they had a thoroughly good education, they know when they are talking reason and when they are talking bosh. And as they understood Latin and Greek, they know how senseless it is to ascribe all the incompetency, frivolity, and weakness of womankind to not having studied the classics.

THE WITCHERY OF MANNERS.

ALMOST every man can recall scores of cases within his knowledge where pleasing manners have made the fortune of lawyers, doctors, divines, merchants, and, in short, men in every walk of life. Raleigh flung down his laced coat into the mud for Elizabeth to walk on, and got for his reward a proud queen's favor. The politician who has this advantage easily distances all rival

candidates, for every voter he speaks with becomes his friend. The very tones in which he asks for a pinch of snuff are often more potent than the logic of a Webster or a Clay. Polished manners have made scoundrels successful, while the best of men, by their harshness and coldness, have done themselves incalculable injury—the shell being so rough that the world could not believe there was a

precious kernel within. Civility is to man what is beauty to a woman. It creates an instantaneous impression in his behalf, while the opposite quality excites as quick a prejudice against him. It is a real ornament—the most beautiful dress a man or woman can wear—and worth more as a means of win-

ning favor than the finest clothes and jewels ever worn. The gruffest man loves to be appreciated; and it is oftener the sweet smile of a woman, which we think intended for us alone, than a pair of Juno-like eyes, or “lips that seem on roses fed,” that bewitches our heart and lays us low at the feet of her whom we afterward marry.—*Matthews.*

ONLY TRIFLES.

“IT is only a trifle, mother; why should I be so particular about the dates of this tedious history. What does it signify to us when King John granted the Magna Charta, or when Queen Elizabeth began to reign? If it were the date of our National Independence it might make some difference.”

“Future events may make it valuable, my boy,” quietly interposed his mother. “There may be a time when the knowledge would be most profitable. And so in every other study; very trifling seems minute attention to moods and tenses, conjugations and inflections. Dull and unimportant, perhaps, seem the definitions of geography or the arithmetical rules which you so much dislike, yet on their faithful rendering does the basis of scholarship rest.”

“But scholarship is not the whole of life,” interrupted Alfred. “I can not help feeling that I was created for something better than these petty details. I want to live for grand aims, not to worry over trifles.”

“Oh, Alfred! that favorite little sentence of yours, ‘only trifles,’ will, I fear, prove your evil genius, and be an insuperable obstacle to your success in life. To not many of us does God allot great deeds or heroic achievements; and if He did, the faithful performance of little duties is the best preparation for them. Education is but a part of life, it is true, but it is the preface and foundation for it, and the boy who can not be worried with the petty details of the school-room is also the one who, absorbed in his castle-building, ‘takes no note of time,’ and reaches the breakfast-room just half an hour after the bell has rung, with hair unbrushed and collar all awry, frequently forgetting to say ‘Good-morning,’ and utterly oblivious of his little sister’s childish re-

quests. Is he not learning to soar far above such petty trifles, and dreaming of future glory? He is again the identical one who wastes his pocket-money for every passing trifle that pleases his fancy, leaving but little margin for useful articles. And he may be discovered on sunny mornings loitering by the hill-side, or rambling through the woods with congenial companions, reaching his class-room in time to receive a bad mark for tardiness—but that is only a trifle.

“Well, Alfred,” continued Mrs. Raymond, dropping her playful tone and speaking sadly and anxiously, “such is not the true foundation for a noble life. In the idle tales of the Arabian Nights you may read of heroes ‘who awoke to find themselves famous.’ There are also romantic exceptions in real life; but in the biographies of those who, believing that—

‘Life is real, life is earnest,’ have adorned their respective professions, we almost invariably find that years of thoughtful self-denial, even in little things, and of careful study, preceded their advancement. The overcoming of petty temptations, and the fulfillment of present duties, were the exercises which strengthened them for heroic attitudes and noble deeds. Trifles have played no small part in the world’s history. They are oftentimes made God’s agents. How often have trifles led to long-continued wars, or paved the way for peace! They have led to great discoveries and valuable inventions. The falling of an apple at the feet of Sir Isaac Newton resulted in important scientific discoveries, and the flying of a kite electrified Franklin. There are no small things, my boy.”

“Oh, dear, what a lecture! and all arising from these hateful dates,” said Alfred, as he

walked away, mentally resolving that in future years he would show to admiring friends what he was capable of; and as for his little faults in that far-off "By-and-by," they would all be easily corrected, or so eclipsed by resplendent qualities as to be unnoticeable. He did not know that the gossamer webs which we carelessly weave around us, time and habit sternly transform into adamant chains from which we are as powerless to escape as the captive from his cell.

School-days, with their pleasures and their toils were over, at length, much to the delight of Alfred, who longed for a wider sphere and freedom from the restraints of boyhood. What though his friends, who knew that he had more than average abilities, were disappointed that at the closing exercises he had taken no higher stand, and that so small a share of honors were accorded him, was it not all to be atoned for in the wider arena of college life? And although it must be acknowledged that he thought with a twinge of conscience how much trifles had to do with his low standard, yet it was followed by a sense of injury that due allowance should not have been made for their insignificance.

His chosen course of medical study was now entered upon, and for a time the young "matriculate" assiduously attended to even trifles, but this practice soon began to be monotonous. Of what availed such exact classical definitions? What had these intricate mathematical problems to do with the future eloquent treatises he was to write, the medical achievements which would place him in the front rank of the profession, or the philanthropic institutions which should add luster to his name? He could not see their connection. And then there were trifling pleasures which diverted his attention from the regular routine of study—oyster suppers, and the cosiest of little wine-parties now and anon.

As may be inferred, his pocket allowance often proved inadequate to supply his wants, while circumstance led to not a few unpleasant incidents and embarrassments. But then he could neither be called dissipated nor recklessly extravagant—these affairs were only trifles after all.

It is true that his talents won him some

fame; that in his favorite studies, when no trifles intervened, he made great progress, and that at the final examination ability and pride combined secured his degree and saved him from an ignominious failure; but that was all. His college laurels had been lost through trifles. He was chagrined, but the world was all before him yet, and through the influence of friends he was soon established as a physician in a good suburban practice.

Need we go on to relate how the successful management of several interesting cases secured his credit and raised his reputation for a time?—yet here, also, inattention to trifles proved his bane. There were the little amenities of social life neglected which prevented him from becoming popular. Disregard of the whims and nervous caprices of crotchety patients procured him their life-long displeasure. Did not the two wealthy Misses Crusty give him up in high dudgeon because he declined to prescribe for a pet poodle, and smiled at the imagined consumptive symptoms of the one and the innumerable nervous complaints of the other? Was not Deacon Jones moved to withdraw his patronage because of procrastination in attending to some trifling ailment of the pride of the family? And Benedict & Brothers were heard to denounce him vehemently because he had jestingly spoken of the dyspepsia of the one and the bunions of the other as small affairs. Of the many appreciative parents and dissatisfied celibates who forsook him and went over to his less-talented but more observant and careful rival, Dr. Fairweather, because of trifling indifference, time will not permit the mention, nor of another class, liberal, unprejudiced, thoughtful, who were reluctantly forced to abandon him because of the suffering of dear ones whose lives had trembled in the balance through their physician's carelessness. Then, too, the habit of occasional "trifling" drams, originating in college days, had strengthened with his years and deepened with his disappointments, until now acquaintances spoke sneeringly of his frequent indulgence, and friends trembled for his future. Many of his school companions and college chums, though not possessed of his ambition nor gifted with his intellectual endowments, had far surpassed him in win-

ning success and fame because "they had not despised the day of small things," or waited for those rare combinations of fortuitous circumstances, which occur chiefly in novels, to happen and waft them onward to fortune and glory.

And his home, that sanctuary whose happiness trifles either make or mar, had he there acted a wiser part? Ah, no! it was no exception. There were trifling infringements on the rights and comforts of others too frequent and too petty to be apologized for. Trifling words spoken in anger or in jest which wounded sensitive feelings and rankled in deeply-tried hearts. Various trifling expenditures, whose sum total sadly interfered with home luxuries, and, ofttime, essentials.

But to us is not given the painful task of relating all the ills that hover around the declining years of a wasted life. Perhaps a kinder Providence had decreed it otherwise, for in the very prime of life Dr. Raymond died. There was a trifling cough and other threatening symptoms resulting from his frequent violations of hygienic laws, and

which was unconsidered until too late. Oh, how vividly in that clear light which nearness to eternity brings did Dr. Raymond see the tissue of mistakes interwoven throughout his whole life! What "might have been" stood out in bold relief from the pictured past which memory held before him. "Only trifles" had frustrated the promise of boyhood, blighted the hopes of manhood, destroyed the sweet affections of home, and, at last, had been instrumental in bringing disease and death. "Oh, that life were again before me!" were words which often trembled on his pale lips.

And though a pastor's faithful words cheered his dying moments and gave firm hope of another life, "where there is fullness of joy," yet often reiterated, among the last messages given to former companions and still steadfast friends was the earnest injunction that, in the guardianship of others, as also in their own lives, they would beware of petty negligences and trifling errors, as they might lead to gravest consequences, and embitter and shipwreck life.

C. J. ANDERSON.

PROMINENT NATIONAL TYPES.

REPRESENTATIVE men are always objects of interest; the more so when we see typified in them the characteristics of many. We have here presented to us the distinctive types of some of the most prominent nationalities with which we are brought into daily contact. All help to "fill up," and all will bring a peculiar and important influence to bear upon the future character and constitution of the nation they are helping to develop. Their several characteristics have for us, therefore, a deep and personal interest.

Foremost among these types, which, aside from their humorous lining, embody the real, stands sturdy, solid, uncompromising John Bull. The likeness between him and his Teutonic progenitor is very striking. Both are "heavy weights," physically and mentally, and, as such, serve as excellent drags on the fly-away wheels of modern radicalism, which, without some restraining influence, would hurry us off to Utopia, the moon, or

some other outlandish realm. Both are conservative, cautious, and slow; but, when fairly roused up, they have again and again shown a massive strength dangerous to trifle with. Both are profound thinkers; and, with all their hatred of radicalism, their love and reverence for all that is old and established, their veneration for precedent, Old England and United Germany stand at this day in the front ranks of human progress and enlightenment. So much for the good old motto, "Slow and sure," which they so well exemplify.

John Bull and Mein Herr are both great lovers of good cheer, though their nations may differ somewhat as to wherein it consists. Mein Herr affects with huge relish many dishes that John could not persuade himself to look at, but both agree respecting the virtues of quantity; and the Englishman's "hale" and the Deutsche's "bier" are as much akin as the consumers thereof.

The two Celts, Johnny Crapaud (though

whatever gained him that title passes our ken, since whatever other culinary eccentricity monsieur may have indulged in, no one ever convicted him yet of a gustatory *penchant* for toads!) and Paddy from Cork—or any other part of the “sod”—have much in common, though in many respects so dissimilar. Both are polite—the one gracefully, the other awkwardly, but perhaps no less genuinely so; both quick-witted, though the Frenchman’s wit is oftener a sharp sword that cuts as well as glitters, while that of the Irishman is the unconscious effervescence

satisfactory opinion and estimate of themselves their importance and capabilities; both are very patriotic. They are comparatively the tow and gunpowder of humanity; good at knocking away old barriers and pulling down old institutions that have outlived their usefulness, even though they may devise nothing better to take their place, and first-rate at keeping the social and political atmosphere of life in a state of wholesome agitation, and thus effectually preventing the world around them from stagnating or suffering from *ennui*.



Johnny Bull — Brother Jonathan — Yankee Squire Crot — Johnny Frog — Paddy Murphy —

of pure good-nature; both full of fight and ready to do battle, the one for glory and the other for fun; both gallantly devoted to the ladies. The Frenchman is adroit, clever, *habile*; while Pat is mal-adroit, profoundly simple in many things, and would not be himself if he did not blunder continually with his hands or his tongue. Both are gifted with a poetic vein; but the Irishman possesses more of the genuine poetic genius, and Frenchman more artistic perception and appreciation. Both, moreover, entertain a very

The Yankee, our typical Brother Jonathan, is pre-eminently a character *sui generis*. There is not his like to be found on land or sea. There is none to which he can be compared save just himself. For “pluck,” “grit,” go-aheaditiveness, enterprise, ingenuity, cautiousness, daring, cuteness, and adaptability to surrounding circumstances, persons, and conditions, he has not, perhaps, his equal—certainly nowhere on the face of the earth his superior. The offspring or creature of peculiar circumstances and conditions,

made up in a great measure of incongruous elements, he is destined, in his pristine crudeness, to pass away, when the exigencies that gave rise to his peculiar genius no longer exist; or, rather, to be modified into a more harmonious development, as is being done even now through the influence of a better combination of the elements out of which he was primarily evolved. The American of the future will not be the raw-boned, lopsided, nasal-voiced typical Yankee, nor the big-boned, awkward, boasting, free-and-easy Westerner; but Western breadth and expansiveness of thought and enterprise, and wealth of rugged bone and muscle, will be combined with Yankee shrewdness and ingenuity, and tempered by English solidity, German thoroughness and profoundness, French polish, and Irish vivacity. Already we see this transforming process going on all around us; perfect types of it are not wanting even now,

and the work steadily progresses as the country grows older and more settled, as experiment gives place to experience, crude haste to leisurely perfection, rough hewing and pioneering to artistic completion, and the adverse elements of nature are subdued and rendered subservient to the wants of man, and life is no longer such a severe struggle for conquest and subsistence. Moreover, we have faith to believe that the future American—he who shall be justly considered as typifying this great nationality—will be emancipated from his thralldom to the “almighty dollar,” the idolatrous worship of which shall no longer be laid to his reproach; that money with him, or with the noblest and best of the world’s population, will be estimated at its just value—and no more. And may all good agencies and influences speed the day!

ALTON CHESWICKE.

JEROME PRINGLE’S PAY-DAY.

“NOW, mother, why do you look so at me, and shake your head? I promised you I wouldn’t learn to smoke nor use tobacco in any way before I was sixteen, and I didn’t; but you don’t know how much chaffing I’ve had to stand in keeping that promise,” said the lad, looking into his mother’s face with an expression in his own that told plainly as words could have done that he wished he could have at once her approbation and his own way.

“Jerome, my son,” returned the mother, in that calm, kind tone that commands and wins the attention of youth, “I know that chaffing is not pleasant to bear, especially to a lad of some spirit, and for that very reason it is the weapon most resorted to by folly when reason and even common sense are on the opposite side of her question; but tell me one thing, have you, in and of yourself, ever felt any inconvenience for want of tobacco, and did you find the effect of that cigar you tried yesterday really agreeable?”

“Why, no—of course not,” replied Jerome, looking rather comical. “I haven’t learned yet.”

“Well, then, since you don’t feel any need

of it, and since, as I know, it is positively disagreeable to you, why should you learn at all?”

“Why, mother, you know well enough that all the fellows do smoke, and chew too—most of ’em—and,” looking up with a half-sheepish air, “a fellow can’t be one bit manly; he seems a kind o’ nobody if he can’t take a cigar. Anyway, how is it you are so particular about us boys, and you never meddle with father? He always smoked since I can remember, and he chews, too.”

“Yes, my son, he does; and I never meddle with him, as you call it, because before I was acquainted with him the habit was formed. Years ago I did not think much on the subject, but I have seen that the use of tobacco is a bondage, and I know that there have been many times in your father’s life when he would gladly have been free from the habit; but once formed it is not easily broken.

“His example but makes me the more anxious that my sons should remain free. Think over this matter, Jerome, *think carefully*; don’t learn to smoke, nor, worse yet, to chew, just to please your neighbors.

Count all the cost, and then, if you really believe that it will be for your future happiness to form the habit, come and tell me so. I shall leave you to follow the dictates of your own judgment; only promise me that you will act on your judgment, and not on any secondary motive."

The mother fixed her eyes on the lad's countenance till he looked up at her, and when their eyes met she seemed to read her answer, for she smiled a tender smile and said with some emotion, "God bless you, my boy; I know that I can trust you."

Ay, and God did bless him—blessed all that woman's sons and daughters with a blessing above all earthly dowers, with a mother, wise, sympathetic, and strong—a woman beloved and trusted by her husband, revered, almost worshiped by her children.

Jerome Pringle's father was a printer, a good workman, and made fair wages. He was also a temperate man, so far as alcoholic beverages were concerned; but he was not robust, and had often been laid aside for weeks together, sometimes with one ailment, sometimes with another, and was besides a dyspeptic of the chronic order.

There were five children, of whom three were boys, Jerome, the eldest, being in his seventeenth year, and he had for more than a twelvemonth been in a grocery-store, where he was receiving salary enough to furnish his own clothing, with something to spare. He was a manly lad of his age, although he did not sport a cigar, and his mother was correct in saying she could trust him, as the event proved. He did, indeed, think earnestly and long upon the tobacco question, and, though no further words passed between them on the subject, the mother knew that he had decided on the right side. He certainly had to bear a good many jeers and scoffs from his companions, but he never showed any irritation until one of them, Tom Green by name, said, "Jerome is tied to his mother's apron-string, *his mammy won't let him.*"

Then he turned like a young lion and replied, in no gentle tone, "Look here! say just what you like about me; I don't care one straw; but don't you mention my mother. *Do you understand that?*"

"Wal, there's no use in flarin' up that

way; I didn't mean to insult anybody," said Tom sulkily, as he tipped his hat over one eye, took his cigar from his lips, and, deliberately taking aim at a poor little green caterpillar trying to reach a neighboring grass-plot, spit squarely upon, poisoning and drowning the miserable grub.

The years went by as years are wont to go, and Jerome Pringle, in his twentieth year, was a man in stature and in steadiness of purpose. Tom Green, who, by the way, was a fellow-clerk in the same house, was also a rather good-looking young man, with an air that he considered easy and elegant, but which, truth to tell, was decidedly swaggering; he had, moreover, attained to the possession of an incipient moustache, and it was his great delight to pull at this when he could scarcely find the hairs with his caressing fingers.

One day, during the last week in June, it happened that these two young men were standing together in the warehouse waiting for some goods that were coming in at the back gate, and they were discussing a projected excursion, picnic, etc., that was on the tapis for the approaching Fourth of July.

All of a sudden Tom struck an attitude indicating much self-complacency, threw back his head and tapping with his fingers on a post near him, said, "H'm! that's a lucky thought! I'll put up a dozen or so of that new brand of cigars; t'other fellows are hardly up to that touch, and I'll distribute a few after dinner, and show 'em what some gentlemen smokes" (Tom's grammar wasn't as good as his tobacco).

Then, leaning against the post and stroking his downy upper lip, he cast a patronizing look on his companion and continued thus: "Tell you what, Jerome, its a reg'lar drawback on you that you don't smoke; a feller never looks so well as when he's handlin' a cigar, that is, providin' he knows how to do it like a gentleman; and nothin' makes a man so pop'lar as to be able to hand out a few prime samples among his friends.

"Then, as for the girls—well, now, I don't believe Nellie Bloom would look twice at a feller that couldn't smoke his cigar with the air of a millionaire. I've seen her watchin' me more 'n once."

This last thrust hit Jerome on a tender place, as Tom well knew, for both of them admired and wished to please pretty, brown-eyed Nellie Bloom.

Jerome winced all the more because he knew that Tom had the advantage of a modest patrimony as capital, which would accrue to him when of age, whereas he himself had nothing to expect or hope for, save what he could earn.

The Fourth of July was come, and also the excursion. Tom Green fully carried out his programme in the matter of the cigars, and deported himself, as he thought, with killing grace, alike to the admiration of the ladies and the envy of his compeers.

After dinner, when he had finished his cigar, he went in all the conscious pride of a conquering hero to seek Nellie Bloom, and honor her with an invitation to walk with him.

He soon discovered her sitting on the grass with Jerome Pringle at her side. In fact their heads were in very close proximity, for Jerome was placing a flower in her hair. Just then she rose to her feet, and Tom ap-

proaching made his bow, then, partly with an intention to be facetious, partly to make a show of intimacy with the young lady, he put his face quite close to hers, pretending to whisper his request. Ah! woe to his self-conceit! Miss Nellie started back, drew her head away in evident disgust, and said sharply, "Oh! don't—put your face so near mine!"

The gallant stood for a moment like one confounded, and then retorted, "You needn't make such a fuss, Miss Bloom; Jerome Pringle's face was rather near yours a minute ago, if I'm not mistaken."

"That was quite another thing, Mr. Green," replied the indignant beauty. "Mr. Pringle's breath is not offensive, he doesn't use tobacco; and unless I should make up my mind to use the weed myself, I intend to keep clear of the breath of those who do, if possible."

Need it be said that minute of triumph fully repaid Jerome for all the flouting and gibing of past years? If it did not, why, he had further pay in the same currency—if you must know. MRS. OLIVE STEWART.

LITTLE WIGGLE.

BY MARY E. ANDERSON.

CUDDLE and kiss, little baby;
Hug me and love me, my sweet;
Dance up and down like a lady:
Clap hands and swing your pink feet.

Open your jewel-box, darling;
Show all your pearls with one smile;
Now, with an all-over wriggle,
Creep on the carpet awhile.

Then, back again in a minute,
Climb to your place on my knee;

Creep-a-mouse, creep-a-mouse, baby,
Where can that little mouse be?

Lay your small head on my shoulder,
Take a good pull at my hair,
And, like the fly on the paper,
Crawl down the back of my chair.

Never at rest for an instant,
Rolling and capering so;
Sweetest, best rogue of a baby,
When do you manage to grow?

The Five Points Record.

ANOTHER "TROUBLESOME" BOY.

A MOTHER'S LETTER CONSIDERED.

EDITOR PHRENOLOGICAL JOURNAL:

BEING an earnest reader of the JOURNAL, I have become very much interested in its teachings, especially as I am the mother of six children, with dispositions as varied as their number. I have one boy who makes me shed very many anxious tears. He is not

what may be called a *bad* boy, but he has such a mischievous disposition that it makes me tremble when I think what may become of him. If he enters a room where his brothers and sisters are playing or studying, he will strike every one within his reach (not enough to hurt them, but enough to raise a commo-

tion) or upset their toys or work. He is always in trouble by his unhappy disposition. I have reasoned with him, and his father has whipped him for some of his faults, but so far from doing him good, I fear it does mischief, for he has a very high temper. The only way I can get along with him is to be always present, or to set him at hard work that will keep him employed until I can be with him.

Now, the question is, Can this child ever overcome his infringing, tantalizing disposition, and become orderly and obedient? I do not wish to be always finding fault with him, but wish him to become, as he grows up, a true and good man, but how to attain this appears to me a great mystery. If you would give me a few words of advice on this subject, I would be very thankful.

ANSWER. Your boy is endowed with a great deal of human nature, and when he becomes old enough and wise enough to work off his steam in legitimate channels, he will be likely to make his mark, and take an honorable position. Most of the angelic children, who never do wrong, are transplanted to a higher life before they grow up.

We have always noticed that a puppy half grown which likes to shake muffs, tear things to pieces, and is ready for a fight with anything that crosses his path, makes the best kind of a dog when educated and settled down to business. And the colt which fights the hardest when he is being broken, is supposed to have more real horse in him for ultimate service than one that goes into the work like a cosset or pet.

You must exercise patience, throw the responsibility of his conduct on himself; rouse his pride and dignity in manliness, and not chafe and irritate his temper. If the child must be whipped, it should be done calmly, sternly, deliberately, and very thoroughly, so that he will remember it, and also remember that it was not given in wrath, and that he is not "vanquished in the fight." It might do such a boy good to send him away to school, where he would learn that a petulant, teasing disposition gets snubbed and repelled, and where courtesy and good manners are necessary to good neighborhood and respectability.

Such children should be submitted to a

careful phrenological examination, when convenient, or their likeness sent to those who are expert in the matter, so that all the aid which science can give may be brought to the assistance of the mother.

COME TO ME!

COME to me!

Come to me in thy brightness and sweetness,
Come to me in thy spirit's completeness,
Come on the wings of love's magical fleetness,
My heart longs for thee.

Come to me!

Come when my feelings are solemn and prayerful,
Come when my heart is weary and careful,
Come when my eyes with sadness are tearful,
My soul yearns for thee.

Come to me!

Come when the morning in brightness emerges,
Come when the noontide with ardency urges,
Come when the night-billow solemnly surges,
My being calls for thee.

Come to me!

Oh, haste in thy coming—oh, darling one, quicken
Oh, come to this breast with care sadly stricken,
I wait for thy coming—I languish and sicken
For sore need of thee.

Come to me!

Though time divide, though distance dis sever,
Soul may meet soul in loving endeavor;
Come to me, come to me, now and forever—
I'm waiting for thee.

Come to me!

Let me but feel thy true arms around me,
My soul shall know peace that seldom hath found
me,
No peril shall chill, no sorrow shall wound me
Leaning on thee.

SOPHIE WHITAKER KENT.

OUR BOYS AND OUR GIRLS.—A correspondent, W. R. V., suggests that we open a special department in the JOURNAL for the more exclusive use of boys and girls. We think well of the suggestion, although we usually have something for our young readers in every number. One scarcely realizes how soon boys and girls who are old enough to read come to be men and women! Here they are to-day, eight, ten, twelve, or fifteen years of age, just beginning to think of taking care of themselves, of assuming duties and responsibilities, of helping; when, as it

were, all at once, we older ones wake up to a realization that, instead of our wards, they are our companions! and, just a little later, they talk of "setting up for themselves."

The importance of wise direction during the period when characters are forming, can not be overestimated. It is now aspirations are kindled which lead "onward and upward," or self-indulgence is sought, which leads downward. The JOURNAL would be a Monitor or a beacon-light, to lead the wan-

derer into safe harbors, where temperance, economy, energy, industry, dignity, frugality, integrity, virtue, devotion, are the rules of practice, and where every blessing follows "right living." We would have boys and girls become noble men and women, according to the designs of the great Creator. Be it ours to teach the way. Shall we open a department for boys and girls? If so, who will sustain it? We shall need their utterances to give it life.

ED. P. J.

Our Country and Its Resources.

That which makes a good Constitution must keep it, viz., men of wisdom and virtue; qualities that, because they descend not with worldly inheritance, must be carefully propagated by a virtuous education of youth.—*William Penn.*

OUR PLATFORM.

[The PHRENOLOGICAL JOURNAL is in no sense partisan or sectarian. It aims at truth, to be found where it may. It will uphold self-government in accordance with Democratic-Republican principles as against any so-called "divine right" of kings, emperors, popes, or priests. At best, human governments, like human beings, are liable to err. This is in keeping with the fact that man improves, and his laws may be revised and improved to conform to necessary changes and improvements in his condition and civilization. The following is contributed, at our request, by a young New England statesman, whose views, or many of them, will be accepted by our readers. We shall have other platforms to offer, from time to time, and it is hoped the public will finally adopt that which shall prove to be the best for our whole country. We must have for our legislators intelligent, honest, capable, high-toned, godly men if we would preserve and perpetuate our institutions.—ED. A. P. J.]

OUR main planks should be comprised of the following principles:

First. Prohibition of the sale of intoxicating liquors as beverages.

Second. Woman suffrage.

Third. Protection to home industry.

Fourth. An early resumption of specie payments.

Fifth. A civil service based on merit and capability, and not political partisanship.

Sixth. The cultivation of peace between nations.

Seventh. The preservation of the public domain for settlers, and not swindling railroad corporations.

Eighth. Strict economy in the administration of every department of the public service.

Ninth. A reduction in the rates of postage, that the blessings of a cheap post may be enjoyed by all.

Tenth. Such a control of the various trans-

portation companies of the country as will insure an equitable return for the investment of capital, and a cheap carriage of goods for the consumer.

PROHIBITION.—In the States of Maine and Massachusetts, which have prohibitory liquor laws, there is the least drunkenness and crime in those communities where the law is most enforced. In the State of Massachusetts today three-quarters of the towns and cities do not have any place for the open sale of intoxicating liquors, and the most of these towns have no secret sale.

There has not been in the last two generations a State which had a license law which enforced it. There is always a large number of liquor sellers who clamor for a license law, and when one is enacted many of them never take out a license or pay any of the dues prescribed by it. A license law, however "stringent," can not in the nature of things prevent intemperance or aid morality; for the plain reason that when you put liquor into men you take away your chance of making them sober and what little reason they had, and give them an intense activity of their passions, leading to all manner of wickedness and crime. It is strange to see men so blind to the truth as to publicly declare the harmlessness of liquors as a beverage, when all around are to be seen the wrecks caused by alcoholic beverages.

Boston was lately cursed by the presence

of the so-called "Brewers' Congress;" the maudlin sentiments expressed showed a great desire for money and station, and a hypocritical concern for the welfare of the people. Some of our learned (?) doctors, who have flooded the country with their testimonials of various wines, beers, and ales, must have prayed in secret to be delivered from their friends after reading the perorations of these brewers. These men talked very loudly about the taxes they pay the government; ah! is there not another side, and a sad one, too? Is it possible to estimate the loss of time to their families and the agony of mind endured by lonely wives, passing by injuries to person and the cost of our prisons, penitentiaries, work-houses, alms-houses, houses of refuge, and the numberless charities, whose mission is to relieve the needy, the greater portion of whom are rendered so by the use of intoxicating liquors? Have we, as a nation, any right to allow the sale of that which possesses not one redeeming feature, whose very breath is poisonous? The time is not far distant when very many of our States will have strong prohibitory laws, and will have them enforced.

To show how near the truth the brewers came, we will add that they boasted of their great increase of sales, whereas, by their sworn returns to the Internal Revenue department, a very great falling off is shown. In the nine months from May, 1872, to January, 1873, they returned 471,092 barrels as sold—this, it must be remembered, was during the existence of the free beer act; in the corresponding months of 1873, they returned 368,650 barrels, a decrease of 102,442 barrels. How these brewers who had liquors of all kinds in an ante-room close by can reconcile these statements, we can not see. The question arises, are we to put the same confidence in other statements uttered at this "Congress?"

THE BALLOT FOR WOMAN.—That a man whose affiliations are low and criminal should have the ballot, and woman, of an opposite nature, not, is a burning shame to the country. If the part performed by woman during the war in hospitals, and lately in the agitation of moral reform, in the suppression of rum-shops, deserves not the ballot, what can be claimed for man's right to vote? We

claim that woman's services to the nation demand that man should at once give her the ballot. The postponing of the time when it must be given but shows the narrow-mindedness of man. We do not believe that the wife of the drunkard will cast a vote for increasing the temptation offered to her husband by the licensed or unlicensed rum-shop. That humanity would be the gainer by giving woman the ballot seems to be true; therefore, let there be such a thorough agitation on this question that justice will be done, and that speedily.

A TARIFF.—All history teaches that a country's material prosperity, especially in its earlier stages, imperatively demands protection. England secured her great prestige in wealth and standing among the nations of the earth by a tariff which was almost prohibitory and of long continuance. While this is not now necessary, our short history teaches that our greatest advance in prosperity has been when our tariff was most protective and our great financial crises hardly without exception after a letting down. We have always paid off more of our national debt during a period of a protective tariff than during the periods of revenue tariff.

SPECIE PAYMENT.—As both parties stand pledged by their platforms of 1872 to an early resumption of specie payments, and so much time has passed in which there has been an opportunity to make a step toward this most desirable end, and nothing practically has been accomplished, it would seem necessary that special emphasis should be given to this principle. The great advance made by France since her war with Germany, and the present excellent state of her finances, should teach us that no backward steps can be of service in this work of settling the values of the country.

CIVIL SERVICE.—That our civil service is thoroughly corrupt, needs no proof; a look at the New York and Boston custom-house rings, which are a menace to the life of the country, would seem to furnish evidence enough on that point. The only way to secure an honest performance of public duties is to let corrupt politicians stay at home, and to elect men to Congress who have some idea of right, and with whom it is not synonymous with wrong. Very seldom does it hap-

pen that a man who does the dirty work of a corrupt Congressman is fit to do the honest work of the people in her public offices. We desire the entire separation of the work of the people from that required by the average politician to secure his election.

ARBITRATION.—Charles Sumner loved peace, and worked hard to secure for his country its blessings. His great desire was to settle all international differences by arbitration. To this end we would urge the agreement of the great nations to settle all difficulties by arbitration.

CORRUPTION.—The low state of Congressional morality was easily seen by the shrewd—to use no harsh but, perhaps, more deserving term—managers of our transcontinental railroads, consequently the rascally Credit Mobilier and other “irregularities” were the result. While keeping the public faith we should demand that the faith of corporations should also be kept, even if additional legislation to this end be necessary. The public lands must be kept for actual settlers, and not for railroads that can not pay their debts.

ECONOMY.—As Republicans, we have boasted of our economy, but developments have proved it to have been more in name than substance. As taxation is sure to be heavy for the next generation, a strict accountabil-

ity must be required of every official having the disbursement of public money.

CHEAP POSTAGE.—The rates of postage on letters should be reduced, if possible, to one cent, and a more general efficiency in the post-office department be secured. The under officers should be paid such sufficient sums as will secure better service. Why it should seem necessary to aim toward the self-support of this department of the public service and no other, we are unable to see.

CHEAP TRANSPORTATION.—All transportation companies should be prevented from issuing “watered stock;” the stock and bonds issued should represent only the cost of the road and equipments. When this has been accomplished, a great step will have been taken toward cheap transportation.

We have sketched our platform—with a few reasons for its planks. That either of the two great parties has vitality enough to make an effort to conduct honestly public affairs, seems doubtful. At any rate, we have lately seen but few instances of official character of such a nature as to warrant us in having any very lively faith in the purposes of the controlling party. We would ask, is not the present an auspicious time for the agitation to commence, that the successor of the Republican party may enter the field to combat wrong in all its forms?—D., Boston.

ADVANCING AND RETREATING RACES.

FOR many years past the sun in his westward course has heralded the steady and resistless advance of civilization, and the proportionate retrogression of every opposing influence. The white man, advancing with the giant strides of the civilization of the nineteenth century, sweeps the red man before him as the wind sweeps away the red leaves of the forest in the autumn time; and church, school-house, and cultivated fireside quickly usurp the place of wigwam and council-fires. Indeed, the white man individually is, in most cases, inferior, so far as mere physical strength is concerned, to the brawny Indian, yet collectively that deficiency is far more than made up by his vast moral and intellectual superiority. From time immemorial the irrevocable fiat has

been that mere physical strength and courage must give way before skill and knowledge—that mind must ever claim supremacy over mere matter.

And this triumph of race over race is repeated through all the descending scale of the brute creation, wherever its members have been taken under the protection and patronage of civilized man. As the wild man retreats, so the wolf who shared the forest with him is forced to yield to the prowess of the dog, that companion of the second; while the lordly bison is compelled, year by year, though the requisite “nine points of the law” be on his side, to relinquish his rich prairie haunts to the more sturdy ox. The wild hog, too, that most intrepid and tenacious of brutes, disappears in some unaccountable

CONTENDING FORCES.
WILD AND CULTURED.



HUMAN.



BOVINE.



CANINE.



PORCINE.

way from his favorite resorts of field and forest, where the domestic hog roots and riots in his stead in ever-increasing numbers. Wherever these two opposing forces meet, there seems to be but one inevitable result—the lower type must conform to, and be blended with the higher, or be exterminated.

We do not purpose now to consider the responsibilities devolving upon the dominant races, with reference to the manner in which they should make use of the power that has been confided to them, or how far the elevation and reclamation of a fallen and inferior race, be it human or brute, is preferable to its extirpation; we will leave these subjects to the political economists, and will consider, in the present instance, the lesson to be derived from the facts so graphically set before us. We see at once, and very clearly, that civilization and savagery, Christian enlightenment and heathen darkness, can not dwell peaceably together—can not occupy the same territory at the same time. They must speedily come into collision, and once engaged, the conflict never ceases, because in the nature of things it can not cease until one or the other has gained the victory. It sometimes happens that civilization gives way before exultant savagery; the wilderness has more than once regained possession of fertile fields which had been wrested from it by the industry of man; savages have erected their temporary habitations on the ruins of ancient cities; wolves have howled and owls have hooted defiance through the deserted halls of lordly palaces; and wild buffaloes and other wild beasts have revelled in broad pasture-lands, long abandoned by any creature that owned the mastership of man. And what has happened, not only once but many times, may happen yet again, if not to whole nations and kingdoms, at least to communities and individuals. And as a relapse is more to be dreaded than the first sickness, so a retrogression into barbarism is worse than primitive savagery.

Although every indication at the present day seems to point to the speedy and final triumph of civilization over savagery in all its forms, not only in this land but in others, yet it well behooves us who rejoice in an enlightened civilization to remember that these retreating races do not monopolize all the

savagery extant; that all the savages would not be dead if every savage nation, so called, were exterminated from the face of the earth, nor all the heathen be disposed of if the whole world were brought within the pale of nominal Christendom. A little timely observation in the very centers of our modern civilization—our large cities—will prove this beyond dispute. For it is a sad fact, one that history has again and again demonstrated to us, that the most enlightened and cultured nations have within their midst the germs of the worst forms of savagery, of which the political butcheries of the Old World, and the atrocities committed under mob rule in both the Old and New, awaken dread in us ever and anon, and sound sharp notes of warning. There is a continual, unending contest ever going on in every community, aye, in every individual, between civilization and savagery, between reason and passion, truth and prejudice, order and disorder, law and licence, one of which will conquer. And when we consider that the character of the community as a whole must be determined by the character of the individuals that compose it, this inner and comparatively unseen contest becomes, to us who have the welfare of civilization at heart, of the most serious importance. If the higher races of reason, law, order, and moderation triumph here, we need have no fear of their final and enduring triumph everywhere. So that victory crown our arms on this battlefield, we can well afford as a nation or as individuals to regard "Lo! the poor Indian" with some degree of compassion and forbearance, and to abstain from the needless and wasteful slaughter of the western bison, whom we can safely allow a chance to compete with our own sturdier cattle—nay, we can even permit the wolf to howl unmolested awhile longer in the deep forests that we have, as yet, no use for, while we devote our energies to the vigorous and relentless extirpation of the whooping Indians and wild beasts of prejudices, ignorance, lawlessness, unreasonableness, base passions, and brutal appetites. May the civilized man in each one of us, the man whose thoughts and actions are guided and governed by truth, law, order, and propriety, most effectually subdue the savage in us!

THE LABOR PROBLEM.

ITS PRESENT AND ITS FUTURE.

A TRUTHFUL picture of human life, as it appears to one contemplating the scene from some distant and undisturbed point of view, presents some dark, sad features. It is aptly expressed by that term, now famous by reason of its connection with a modern scientific theory, "The Struggle for Existence;" and the advance of the few to favored positions, where they are enabled to achieve all their ambitious plans and chant pæans in praise of modern civilization, may also be characterized by that other equally famous phrase, "The Survival of the Fittest." In fact, what finer description can be given of the plan of human life as apparent in society than to say that everything is regulated by the law of Natural Selection? As among animal tribes and barbarous races of men species are preserved, and in an improved form perpetuated by the survival of the fittest specimens in the universal struggle for existence, so among civilized races the plan of progressive improvement is illustrated in the same way. Those who have strength, genius, force of will—in short, the most favorable endowments of body and mind, maintain themselves in the strife, push their way on to honor, wealth, influence, make their mark, and perpetuate their name; while those less favorably gifted with these aggressive qualities are defeated, pushed to the wall, or crowded out of existence altogether.

And to a mind spiritually enlightened it is one of the saddest sights to see the myriads of human beings whose life is summed up literally in that one phrase, "*a struggle for existence.*" All the energies of mind and body absorbed in the effort to provide for the wants of the physical nature, and these but meagerly supplied at that! The most severe and unintermittent toils do but half provide the supplies needed for the life of the animal part, leaving the spiritual without culture, and shutting out all those noble satisfactions which flow through that Divine source. Is it not a fact of terrible significance that the vast majority of earth's population are, and ever have been, poor? Those whose secular wants are amply met without the necessity

on their part of undue anxiety and labor, constitute but a small fraction of the human family.

Why is this? and how may the evil be remedied? It is the great problem of the age. Is nature a hard and ungenerous step-mother, refusing to yield an adequate support to her children? Not so; the earth brings forth enough and to spare for man and beast. Water, air, and land are teeming with riches inexhaustible. The sources of natural wealth have never yet been half surmised, much less explored and used. What mighty forces lie slumbering beneath the external forms of things waiting for the genius or enterprise that shall press them into the service of man! What a magazine of unused power in the winds and waters, and in those subtile agencies that work wonders in the molecular world! Here are servitors willing and strong enough to do all the weary work of the nations. Yet with all this array of beneficent forces—all these profuse capabilities of soil, climate, seas, lakes, rivers, mines—yea, and available wealth enough actually produced to place every son and daughter of the great family above want, we are still confronted by the grim fact that the mass of the population, even in the most favored countries, are poor—poor, in many cases, notwithstanding their frugal and industrious habits; many of them frightfully, hopelessly poor!

THE LACK OF ORGANIZATION.

A glance at the condition of society reveals the fact that the organization of interest and effort is imperfect. Humanity is in essence a unit of force and desire. Underneath a diversity of pursuits we recognize the common aim to get the good, whatever it be, which the nature of each is capable of appropriating and enjoying. And everywhere we observe a wonderful adaptation of means to this end. Besides a supply of common wants, each different human organization finds in the universe something to which it is specially related. Thus, provision is made for universal welfare, since means exist for the supply of every want, and none need go unprovided.

Do the suffering and discontent apparent on all sides come, then, of Divine intent or of human imperfection? Is it not the unwise pursuit of personal good that works all the mischief? Individuals fail to recognize nature's plan of a *common* life and interest. They forget that we are all bound together as a net-work of nerves in a living body. The injury of one part is the misery of all the rest. No man can live apart from men. We are all born into a universal family, connected with all from the lowest to the highest by innumerable ties of sympathy, interest, and duty, from which the Eternal Maker has taken care that there shall be no escape. Ignorance of this law, and substitution therefor of the delusive policy of leaving all things to the natural antagonism of individual interests and passions, has led us far away from the true science of government. Supply and demand, competition and devil-take-the-hindmost, never did and never can afford a basis for society, in the proper sense of that word. A union of men upon such principles is little better than a compact among bandits or burglars. Hence the perpetual antagonism of labor and capital, the ineffectual struggles of the poor with want and crime, the indifference of the well-paid and well-fed to the dangers to be apprehended by the State from the perishing classes. All social evils and wrongs have their root and justification in this Gospel of Mammon. Many refuse to perform their share of the world's work because they have power to do so, throwing the burden of their support upon more willing hands. That they may eat without working, others are compelled to work without eating. Another class, not content with their rightful portion of nature's goods, insist on absorbing also the share of their fellows. The strong prey upon the weak, insensible that their injustice breaks down the safeguards of social order, and invites lawless reprisals in turn. One, desirous of exercising some useful talent, finds another who would do the same, and, instead of combining their efforts and interests as wisdom directs, the two straightway become rivals and enemies. By intimidation and opposition they seek to destroy each other's work; whereby the world becomes a loser as well as each of the rival claimants. It is

safe to estimate one-half the industrial talent of the community as lying idle, or even perverted to positively vicious ends, for lack of a free field and proper encouragement. The world would smile with plenty if these wasted, or worse than wasted, energies were gathered up and set to work in the right direction.

WHO IS RESPONSIBLE

for these evils? Evidently not any one in particular. They are the inheritance of past ages—legacies of ignorance—results of an imperfect organization of social forces. Mankind are sneaks, rivals, or enemies; not because nature hath made them such, but rather because a perverted self-interest has led them to assume false relations toward each other. They have not yet learned the folly of all this, nor the wise advantage of seeking to promote individual interest by co-operating with all the rest. This, in few words, is the philosophy of Social Science, to which attention is now more than ever being directed. To this attitude will enlightened self-love at length force all mankind, at least all civilized peoples.

The great need of the hour is light upon questions pertaining to social and political administration. Herein lies all hope of advancement for the race. There can be nothing gained in the direction society has been pursuing. The possibilities of the selfish system have been exhausted. The false principles underlying our affairs have been fully tried, and the result, as apparent in the growing light, is proved to be failure. Harmony, prosperity, spiritual growth, the grand ends of life for individuals and nations, are not possible except out of the line of existing arrangements. So far as the spirit and methods prevailing in the past are consistently carried out, they lead to injustice, oppression, discord, distress—all unhappy and downward conditions. There must be new reckonings and a new departure. These the nations will soon be ready to take. The old system, having served its uses, is effete. The breath of summer is playing upon the frozen solitudes. The ice-pack is breaking up; and soon, we trust, the old ship of human life will drift from her moorings into the open sea of endeavor, allured by the vision of brighter lands.

THE PRESENT A PERIOD OF CRISIS.

To every thoughtful mind the passing time is of supreme interest. Human life seems stirred to its profoundest depths, and all things portend change. Forces are abroad everywhere, latent or cognizable, which have a potent bearing upon individual and social destinies. Beliefs, usages, laws, institutions—nay, even the character and organism of whole peoples, are undergoing transformation, thus preparing the way for a new order of affairs on earth. Believe as we may in the desirableness of all this, we shall probably have to accept the situation and make the most of it, for nothing seems more certain than that the forms of thought and life which have answered our purpose will not do for the coming man and woman. There is many a step yet to be taken in the ever-advancing march of our race to higher conditions. Some of these might not be sanctioned by those who claim pre-eminence as safe thinkers. What if they are *predestined* nevertheless? We may do something to hinder, we can scarcely hope to avert them. The supreme good has not been attained in any form of social arrangements or institutions hitherto devised. More light is breaking and yet to break upon these subjects; and when it fully appears mankind will gladly reject much to which they now tenaciously cling. In the progress of reform there must needs be an advance guard, who always seem to those in the rear to be pushing things to the verge of ruin. But we have only to wait a few years to see the whole army successfully passing over the most advanced ground held by prophetic souls to-day. "The history of the State," says Emerson, "sketches in coarse outline the progress of thought, and follows at a distance the delicacy of culture and aspiration."

A NEW ORDER OF THINGS IMMINENT.

With all poets, seers, and sages, we believe in a millennial reign of peace and prosperity on earth. This faith is ingrained in the very structure of the human mind. Mankind in any age can not comprehend themselves without perceiving that their wants are not fully met in any institutions of society then existing. The aspirations of the spirit for knowledge, purity, freedom, are a Divine prophecy of better things to come. And it seems to

be now a prevailing hope among the oppressed of all nations that here in America—here, under the light and inspiration of comparatively free institutions, the new social order shall first appear. Here, on our favored soil, uncursed by ancient despotisms, shall the foundations of the new political edifice be laid, which shall be for the honor and defense of our children and our children's children for many generations. Here shall be wrought out in practical forms of life the grand problem, heretofore dimly outlined in our political constitution, of Equal Rights for all classes. Hitherto that heaven-born principle of equality and reciprocity has had but a theoretical existence in our midst. It has shone forth "a glittering generality" in the charter of our rights and liberties. Men have admired it afar off, as they do the stars of heaven, but have not sought to walk by its light. It is the aim of this new Divine movement of humanity to make real what has till now been but theoretical; to give a fresh impulse to the moral machinery prepared for the regeneration of society; to bring spiritual forces into practical ascendancy, and compel assent to their reality and importance in the every-day business of life.

The present time affords happy omens of progress in this vast work. The mute cry of the oppressed, the prayers of sorrowing millions for guidance to better conditions, are responded to in unexpected ways. New life is springing up in their hearts. A new sense of power and alliance with eternal laws is urging them to united action. They are fast ripening for rebellion against conditions once accepted as inevitable. When has the world exhibited so general and earnest an awakening to the evils of poverty, ignorance, and crime, and of the causes which lead to them, as now? When have the burdens of monopoly and privilege and political corruption and of laws discriminating in favor of property as against man, fallen with more crushing weight upon the people, or aroused a deeper resolve for deliverance? Is there no significance in the strikes among workingmen, and the trades-unions and other societies for mutual support and defense, now so general in cities and manufacturing towns? The statesman and political economist think otherwise. They recognize in these move-

ments in the interest of labor the working of a general law which challenges attention—the foreshadowing of mighty forces at work behind the scenes of social life effecting an equalization of conditions for all classes. It is something more than the fact that individuals here and there are destitute and dying of starvation. It means that the number of those who depend upon charity for the means of living is increasing out of all proportion to the general increase of population; that whole classes of our people—classes formidable in numbers, and by no means to be despised in point of intelligence and worth—are waking up to the fact that they are overworked and under-paid. In ordinary times their utmost exertions, coupled with the most rigid economy, barely suffice to procure for their families food, clothes, shelter, and fire, in meager supply and of poor quality. In seasons of general panic and suspension of industry, it is easy to understand what must be their inevitable portion.

THE AGRICULTURAL PROBLEM.

Nor is the evil confined to the crowded populations of our cities. There is a general feeling of depression and unthrift prevailing in rural districts also. While many farmers are fairly prosperous, and few suffer actual physical want, it is plain that the majority of this class have hard work to live. Their homes are mean and scantily furnished, their dress shabby, their families poorly supplied or entirely unprovided with means of amusement and mental culture, their farms mortgaged, and although they pinch and screw in the use of the common necessities of life, counting every cent of personal and household expenditure, yet each succeeding year finds them no better off, if not a little worse than the one before. Nor is this ill-fortune attributable wholly or chiefly to the fault of individual sufferers. It exists in connection with industrious habits and ordinary prudence of management. The cause lies deeper than many seem willing to suppose. It is demonstrable that millions of bushels of corn are annually raised in the west and shipped over lines of railway to meet the demands of the east and for foreign shipment, for which the producer never receives a price equivalent to the cost of production. Who is enriched by this generous contribution of his toil? In

Illinois the farmer receives as the net proceeds of 3,600 bushels of wheat the sum of \$300. Sixty bushels of corn and one dollar will just pay for two pairs of boys' boots. An Iowa farmer writes: "A neighbor of mine—a hard-working, enterprising man—who has 100 acres of wheat now growing, who raised nearly as much last year, came to me the other day to borrow five cents to enable him to mail a letter." This fairly represents the condition of the agricultural population in many sections of the country. Meanwhile an insatiate ring of politicians, salary-grabbers, speculators, and thieves are seeking to control governmental affairs, the working-people footing the bills. Unwise or positively corrupt legislation enables speculation in all values to run rampant. The hard-earned wealth of the nation, which belongs of right to those whose toil produced it, goes to enrich others who never earned a dollar by useful labor, but who manage to live by manipulating stocks or making "a corner" in wheat or gold.

INFLUENCE OF POPULAR EDUCATION.

This miserable, enslaved condition of the industrial classes is becoming quite too general. Year by year it grows more depressing and intolerable. For was there ever a time when the refinements and decencies of living were so generally prized, or their want so keenly felt as now? Was there ever so large a share of the time and means of the people demanded for dress, artistic decoration, the amenities of the home and fireside, for amusement, culture, travel? This is as it should be. It is idle to preach against these tendencies. They are mainly in the right direction. They indicate a general refinement and elevation of character. The laboring classes, especially the better sort, share in these expensive tastes. Should they not have the means of reasonable gratification? To accomplish this the hours of toil must be abridged and the remuneration increased. It is this reasonable demand on their side, and the reluctance of the capitalist on the other to submit to any reduction of the rate of his profits, which gives rise to the struggle now going on in this and all enlightened countries where the workingman is anything better than a slave or a tool. Nor is there any hope, thank God! that this controversy

can end until it is settled upon the basis of impartial justice. On the contrary, until so settled nothing is more certain than that the breach will go on widening and the opposition waxing fiercer to the bitter end. If it is right and fitting that the farmer, the mechanic, the day-laborer, should be comfortably clothed, housed, and fed, without the necessity of over-work, and should have, in addition, a fair share of those advantages which go to make up the higher education to be sought by all, then we may be sure he will demand these things; and to demand them is to get them. Thanks to our democratic constitution, the people are still the fountain of law in this government. Whatever else may have been lost, the form, at least, of liberty remains. The ballot of the humblest worker among us counts the same as that of the lordliest millionaire. Reckoning by numbers, the balance of power is largely on the side of the workers. It is their ignorance, their isolation, the lack of a fraternal spirit among them, which enables capital to rule them with a rod of iron. But is any so simple as to suppose this state of things will last always? The blindest can not help seeing the handwriting on the wall. Signs of reaction are visible on every side. The burdens of the hour awaken a spirit of inquiry and alarm. Injustice has overreached itself. The tightening clutch of monopoly begins to tell upon its victims. The more intelligent are awakening to a perception of causes and remedies. Partnership in misery creates mutual interest; interest begets co-operation; co-operation, strength; and strength wins the victory.

CLAIMS OF LABOR.

The workingman, as soon as he emerges from a condition of abject ignorance, demands an equitable share of the profits of his industry. He feels that in return for faithful and persistent labor, and the practice of strict economy and prudence, he is entitled to something more than a bare subsistence. He should have the satisfaction and reward of accumulation. The results of his toils, after a reasonable length of time, should be such as to place him in a position of comfort and independence. He does not childishly ask to be made rich by act of legislature, but merely to be allowed to hold

what is properly his own. The farmer wants to know, when he brings his wheat and corn, his vegetables and fruits, into market, why he can get barely the cost of production, often less than the cost, while on everything he buys—his tea and sugar and cloth, his tools and implements, he has to pay a profit of from thirty to one hundred per cent. The working men and women are acquiring the disagreeable habit of asking why the merchant, the banker, the speculator, who add not one dollar to the available wealth of the community, should grow rich, while the majority of those to whose faithful toil the world is indebted for all the wealth there is, are put to their wit's end to get the barest subsistence. In a word, why should the creators of wealth get the smallest share of it? This is a simple question, but it goes to the bottom of our social organization and touches the fundamental injustice. It is fairly launched upon the current of public thought, and nothing can prevent its being carried to its logical conclusions. It involves a radical investigation of our entire system of production and exchange, of banking and currency, of land tenures and interest; and it points to the substitution of some system of equitable co-operation in place of the present absurd and ruinous principle of competition and profits.

The right of labor to a full share of its products is founded in self-evident justice. It is good against all prescriptive claims and all class legislation whatsoever. It must in time prevail. All the instincts of philanthropy, all the wisdom of statesmanship and teachings of social science, with the combined forces of the heavenly spheres to back them up, are pledged to the emancipation of the producing classes. There can be but one result. For that let us prepare ourselves. It involves the necessity for radical changes in prevailing ideas, usages, and institutions—indeed, in the whole tone and spirit of our civilization. Much that people deem settled will prove in the incoming flood to be based on shifting sands. Venerated safeguards of law and custom will be but as cables of flax to stay the devouring fire. There is no telling how many of our notions of social ethics and individual rights will take rank as exploded prejudices in the coming time. What

seems now a hard knot to unravel may appear simple enough when the sword of justice shall have cut it asunder. Nations have ever shown an unexpected aptitude for acquiescing in *facts accomplished*. The reform so difficult—nay, impossible to achieve by reason of the interests and prejudices arrayed against it, finds itself carried out some day, the world scarcely knows how. Prejudice and selfish interests leagued together are, no doubt, a power on earth to bolster up wrong; and so long as Heaven chooses not to interfere, they have their way. But a day of reckoning comes. The vials of wrath are

outpoured; millions are fired with the sacred contagion; the refuges of evil and lies are swept away, and the people awake from their bewilderment to rejoice that the iniquity which centuries seemed but to strengthen has crumbled in a day. Have we forgotten “the peculiar institution” and its tragical fate? And now that chattel slavery is dead and buried beyond hope of resurrection, are there no other slaveries to provoke the wrath of Heaven? Yea, verily, the air is even now thick with portents of doom to the vassalage of labor and the subjection of woman.

OUR NATIONAL CURRENCY.*

VERY strange are the eccentricities of genius. Sir Isaac Newton, after discovering the law of gravity, which enabled astronomers to weigh the planets as readily as the grocer does tea, and after demonstrating his administrative capacity, by bringing order for the first time to the transactions of the British mint, is said to have called his servant to move his library fire farther off, as he was too warm. That eminent ship-builder and navigator, Noah, after bringing his precious cargo safely into port, took an early opportunity, like many of his sea-faring successors, to get most disreputably boozy, to the great scandal of his sons, who, with a delicacy seldom equaled and never surpassed, walked backward and hid their father's disgrace.

Mr. Bonamy Price, Professor of Political Economy at Oxford University, England, author of the little work whose title is given below, reminds us forcibly by his great power of analysis at one time, and extreme silliness at another, of the distinguished persons referred to above. Shakspeare said:

“The evil that men do, lives after them—

The good is often interred with their bones,”
—which we don't believe is true of our days, but that one of our most besetting dissipation is a tendency to indiscriminate canonization. However this may be, we are fully convinced that the recollection of his true and brave words and earnest and timely teaching will keep his memory warm wherever our language

is spoken, long after his fallacies, which are few, have been forgotten.

As the title of the work indicates, it is divided into two parts, of which we will now review the first, to wit:

“OUR CURRENCY.”

The professor, in honest Saxon, terms it “shocking bad” (which at first grated harshly on our nerves, but on examination we agree with him) in the use of one-half of it (the national bank notes) being given away by the government to its favored oligarchs, and the other half (the greenbacks) being refused by the government in payment of import dues, and discarded by the government as unsuitable to pay interest to the bond-holders.

Pronounced by law and custom good enough for American producers, but not good enough for American and foreign bond-holders; sent out into the world, like Cain, so branded with this repudiation, that even such a consummate bullionist as Sam. Hooper, of Boston, remembering his American citizenship and parentage, could not restrain his indignation at the outrage of thus discriminating against the American and in favor of the foreign legal tender; saying, in the House of Representatives, that the effect of this discrimination would be to depreciate them in advance as compared with coin, by declaring them in advance to be so depreciated. But, strange to say, that thus hamstrung and loaded with shackles and contumely, there is but ten per cent. difference between its purchasing power and that of its free and petted competitor, coin.

Free the greenback and make it convertible into and redeemable by a national interest-

* OUR CURRENCY. The Reign of Panics. By Bonamy Price, Professor of Political Economy in the University of Oxford, England. Pp. 24, 18mo. New York News Company.

bearing bond, as it originally was, and it will be here, as it is, with all its repudiation, in Berlin, at or above par, and no longer be truthfully stated a "shocking bad currency."

VERY LITTLE GOLD NECESSARY.

The professor remarks: "If a currency is *thoroughly convertible*, I don't think it is of great importance that there should be a large stock of gold. Provided the currency is issued by an issuer who is perfectly safe, thoroughly responsible for the debt, the public won't ask gold in exchange for his notes. They would rather have the notes." And later in his remarks he shows by figures where specie payments are undoubted; that is, in sound, conservative England, 10 shillings only in £100 (or 50 cents in \$100), were used in liquidation—to which we append memoranda received from eminent authority some weeks since.*

It will be observed that the professor concurs with us in emphasizing the vital necessity of convertibility, as we urged in these columns last September, thus—to "*make such legal tender convertible, at the option of the holders, into Treasury bonds.*" The professor very sagely remarks: "The Russian will not take American greenbacks, nor in the very heart of Russia will they take English notes. You must pay in gold." That certainly is very hard on the greenbacks, and in any future legislation should

* To show how very small an amount of banking deposits are made in the form of money, we give the following statement made by Sir John Lubbock before the statistical society in June, 1865, in which he analyzed a sum of 19,000,000 paid into his bank by customers:

Checks and bills	£18,395,000, or 97 per cent.
Bank of England notes.....	408,000
County notes	79,000
Coin	118,000

From which statement it appears that only 3 per cent. of banking deposits are paid in in the form of money, i. e., notes and coin together, and a little more than $\frac{1}{2}$ per cent. in specie.—Patterson's *Science of Finance*, pp. 5, 6. Edinburgh, 1868.

NOTE TO LUBBOCK'S STATEMENT. — £18,395,000 in checks and bills here given are "cleared" by checks on the Bank of England without the use of notes or gold.

SCOTCH BANKS—1872.

	<i>Liabilities.</i>
Capital.....	£9,397,000
Capital, rent, and undivided profits.....	13,191,747
Deposits	69,392,857
Notes in circulation.....	6,348,369
	<i>Assets.</i>
Banking advances.....	£66,660,488
Stocks and other securities	3,010,034
Bank premiums.....	1,305,590
Reserves (government securities, coin, notes of other banks and cash with London banks)	24,719,096

NOTE.—Here are fellows whose capital and surplus are £13,191,747 loaning the public £66,660,488, and holding stocks, etc., cash premiums, and reserves amounting to £29,036,720! These two amounts being £95,697,208—which will dash her to pieces. Truly yours,

H. C. BAIRD.

be constantly borne in mind. Perhaps if we offered them at \$285 for \$100, and trade it out at that, they might be as kindly considerate as our English cousins were; they certainly could afford to be more so, as they would not expect to be the allies of both sides of any future contest, at the same time as our English cousins were in our late war.

BANKERS SHUN SCRUTINY.

"The English bankers are doing so well that they detest of all things any inquiries as to the nature of their business." Our bankers showed fraternity of sentiment when, a few months since, a motion was before the House of Representatives for the formation of a committee to learn and report how many members were interested in national banking; that is to say, had directly or indirectly, the privilege of borrowing money for nothing, while other citizens were compelled to pay from 7 to 20 per cent. The motion was lost, showing conclusively what largely inspired the action of those judiciary agents.

SECRETARY M'CULLOCH INDORSED.

Prof. Price considers Secretary McCulloch was right, but where and when he does not tell us, which is an important omission, as McCulloch changes almost as often as the wind. Henry C. Carey, an American authority second to none, says, in a late letter to our present Secretary of the Treasury, B. H. Bristow:

"In May, 1865, very shortly after his accession to the post of Secretary, I had a conversation with him, in the course of which he declared himself a disciple of Mr. Clay and thorough believer in his protective doctrines. Regarding him as sincere in this expression of opinion, I said, that in view of the great changes now to be met, millions of men North and South, returning from the field and needing to seek employment at a time when the Government must not only cease to be a purchaser, but must, on the contrary, become a seller of commodities it had already purchased, it was most desirable that all our measures should tend in the direction of stimulating production and making demand for labor; and that, if I had my will, gold should be at 200 for the next seven years, as the premium afforded a protection, that even false invoices would not enable the foreigner to avoid. Fully coinciding in the view thus suggested, the Secretary answered, 'That is too much; but I should gladly see it at 175.' Three months later he was instructing his representative abroad to give assurance that we should have resumed specie payments before the first 7-30s became due. Two months

yet later came the destructive Fort Wayne decree, and from that hour did the Secretary persist in the absurd and injurious course of policy therein announced. But a few months later he presented himself as an opponent of those doctrines of Mr. Clay of which he had been before the advocate. What is the value to be attached to his present opinions may be judged from this exhibit now for the first time on paper, although fully authorized by him on the day succeeding the conversation above described. He is, as I believe, the only one of our Finance Ministers who has ever retired with the reputation of a large fortune accumulated during his term of office. His immediate successor retired from office as poor as when he entered it."

We trust that the professor, after showing up so graphically the one-half per cent. specie basis, knowing that we don't own a dollar of specie in our own right; also that when we had \$20,000,000 gold in London his countrymen, as by the testimony of ex-Secretary Boutwell, would allow us to remove it only on the pain of European ostracism for our bonds; knowing that our subserviency to European oligarchs had already reduced our currency to one-half that of any other civilized nation per head, while needing twice as much. We trust that the esteemed and venerated professor did not intend to counsel us to sacrifice what little of life-blood there is yet remaining in our depleted industries, and to lay the corpse at the feet of what he, more than any other man, has demonstrated to be the perfection of gaseous snobbery—the organized credit balloonists of the British Empire.

THE FUNCTION OF CURRENCY.

He says further: "The only object of currency is to exchange goods, precisely as the only object of the Batavia steamboat was to bring me and fellow-passengers from England, and the goods on board also. They are both tools—one to carry us across the water, the other to enable one man to get his goods into another man's hands, and that, I say, is the only object of currency." Excellent, but not half so well expressed as by Mr. Charles Sears in these columns, when he said, "The function of money is to transfer values from hand to hand, as water floats products from place to place."

THE PUBLIC WILL HAVE NO FAITH IN GOVERNMENT ISSUES.

The professor coolly says: "The public would not believe in any paper issued by the Government direct. The principle, as I said

before, is sound. The profit belongs to the nation, but a government or a parliament are bad issuers of notes pledged to be paid on demand." This forcibly reminds us of the lawyer who visited a client in prison, and after hearing his story exclaimed, with the utmost confidence, "They can't imprison you for that!" "But they have," said the client. "I tell you they can't," said the lawyer, and he stuck to it. So with the venerable professor; he states with the most dogmatic assurance, that though the principle of the Government issuing convertible notes is sound, and the profit belongs to the nation, the people won't believe in it—*i. e.*, the currency.

We respond, like the lawyer's client, that they do believe in it, and such is their faith in our institutions, that, crippled, mutilated, or, to use the professor's own concise language, "shocking bad currency" as it is, compared with its possibilities when convertible, that even President Grant, its most earnest and efficient enemy, and devoted ally and obsequious tool of the bullionist though he is, in his Message of October 1, 1873, said:

"The experience of the present panic has proven that the currency of the country, based as it is upon the credit of the country, is the best that has ever been devised. Usually, in times of such trials, currency has become worthless, or so much depreciated in value as to inflate the values of all the necessities of life, as compared with the currency. Every one holding it has been anxious to dispose of it on any terms. Now we witness the reverse. Holders of currency hoard it as they did gold in former experiences of a like nature."

A TIRED WOMAN'S LAST WORDS.

HERE lies an old woman who always was tired,
For she lived in a house where help wasn't hired.

Her last words on earth were, "Dear friends, I am
going
Where sweeping ain't done, nor churning, nor
sewing;

And everything there will be just to my wishes,
For where they don't eat there's no washing of
dishes.

I'll be where the loud anthems will always be
ringing,
But, having no voice, I'll get rid of the singing.

Don't mourn for me now, and don't mourn for me
never,
For I'm going to do nothing forever and ever."

Department of Literature, Science, Education.

LECTURING ON PHRENOLOGY.

BY A BEGINNER.

I HAD chosen a small village for the purpose of delivering my first course of lectures; had secured a small hall, and was in hopes that a small audience would greet me. My want of confidence and my want of experience were on a par, and I was perfectly content with the day of small things. At the hour appointed for my lecture I was on hand. A double row of portraits hung against the wall at my back, and a row of casts stood upon the table before me; but my audience as yet, had not arrived. Ten, twenty, thirty minutes went by; still I sat alone, listening with growing solicitude for the sound of coming footsteps above the noise of the fierce, stormy wind which roared without.

To tell the truth, I felt somewhat depressed. I had schooled myself to very moderate expectations for the outset of my career; but to be greeted with an empty house was a test of my hopefulness which I had not expected. At last the door opened, and a couple of rustic youths entered. They looked frightened, as if they were trespassing upon forbidden ground. But I gave them a look of welcome, and they took seats. Others soon followed them. And when an audience of a dozen had assembled, I began my lecture. The people continued to come in as I proceeded, till my expectations were fully realized in an audience of forty. I do not know how clearly to the minds of my auditors I presented the principles of the science, or how well I established those principles by fact and argument; and how much the cause of the science was advanced by my stay in the place will always remain among the undetermined things of my life. But I remember that I was painfully suspicious at the time that the good people of the town regarded me as a sort of neophyte, one whose honesty of purpose might be commendable, but whose seeds of usefulness were still in the green and tender sod. Such was my introduction to the profession. I have since

learned many things in the practical application of the science, a knowledge of which is essential to success, and which knowledge can come only from actual experience.

A young phrenologist, like a young lawyer or doctor, must not expect to spring at once full-fledged into a lucrative practice; he must labor for a time under the disadvantages of being inexperienced and unknown. After these hindrances have been removed, if he be made of the right material, success will come to him, fully as abundantly, much more speedily, and with a much less previous outlay of time and money than in any of the learned professions.

It was my misfortune, after leaving my opening town, to strike a section of country through which a quack phrenologist had passed only a few weeks before. He was a fellow who had taken up the subject as a sort of catch-penny, and who probably did not know enough of the science to name and locate all the organs. Yet by making himself familiar with bar-room loafers, and charging a small fee for "feeling of their heads," he managed to eke out a living through the hard times of winter. Now, a quack phrenologist is one of the most despicable of impostors. There are quacks in medicine, shysters in the law, and wolves in clerical garb; but these meet with the contempt which they deserve, while the professions which they disgrace remain unimpaired. They fall like worm-eaten apples from the bough, while the tree stands and the sound apples grow to maturity. With Phrenology the case is different. It is a comparatively new science, and the people in general have very imperfect ideas as to its scope, tendency, and importance. When, therefore, one of these mountebanks comes along, those who look favorably upon the science are disgusted. The knowing ones, those who have the most decided opinions upon every subject, but who understand the principles of not a single

one, are elated, because they always said there was nothing in Phrenology but charlatanism, and now they are satisfied; and the unthinking take up the strain and re-echo the verdict with the self-complacency which generally accompanies ignorance. Phrenology and the knave who clothes himself in its garb, thus fall into the same disgrace.

A mountebank phrenologist is an enemy sowing tares in his neighbor's field. He who comes after him must grub out the noxious product before he can sow good and honest seed with any prospect of a harvest. I had a good deal of this grubbing up to do for the first few weeks. This, joined with my inexperience and an ill-chosen section of country, made the opening of my career rather inauspicious. But I persevered, finding abundant consolation in the reflection that, however strenuous the endeavor put forth in the race, the goal was worthy of all efforts made to reach it.

In the practice of Phrenology one meets with a great variety of character, and is consulted from a great variety of motives. If the phrenologist be true to his science, he will need to have not a little moral courage to meet the displeasure which his verdicts sometimes induce. Here, for instance, comes a man to consult him in regard to the occupation for which nature has best adapted him. He set out in life with the greatest confidence that he possessed unbounded capabilities. But having tried several occupations, and failed in each to secure the success which his Self-Esteem had promised—never doubting that there are latent powers within him which need only the proper opportunity to be called into successful activity—he finally appeals to the phrenologist, if from him he may learn wherein his great strength lieth. The phrenologist sees at a glance where his great strength lieth, and a strict regard for truth and duty compels him to inform his client, by implication if not in so many words, that he would be most remarkably endowed if his other mental organs were only constructed on the same plan as his Self-Esteem. The opinion of the occupation for which he is best adapted disappoints him grievously, but his confidence in himself remains unshaken, while the phrenologist and his science are doomed to his lasting contempt.

Another, perhaps, breathes the inspirations of poesy; he has written much and he has written well. He knows his capabilities, and is satisfied that they are of a very high order. Neither the decision of the phrenologist, nor the rejection of his effusions by a dozen different editors, would convince him to the contrary. He consults the phrenologist, not from any expectation of benefit, but partly to have his aspirations sanctioned by science, and partly to test the science. In the first object he utterly fails, but the test of the science is to him conclusive. And he adds another to the long list of those who will not believe, because they would believe to their own condemnation.

Another character frequently to be met with is the man in whom Self-Esteem and Approbativeness have formed an alliance, and sit regnant. When the phrenologist requests a subject from the audience, this fellow will start up and take his seat before the company, with the air of one who thought that now the phrenologist had a subject upon which he could exhaust his eloquence with the greatest satisfaction to all. His hair is parted a little off the center, and falls in artistic negligence over his scanty forehead, while his dress and manner indicate a studied combination of the precision of the fop with the carelessness of the rough. If the phrenologist be a man of vigorous and decided manner, he will perhaps sum up the fellow's character, to the applause of the audience, in a single word—Saphead.

But beside those who consult Phrenology from curiosity and vanity, there is a very respectable class who have investigated the subject far enough to become convinced of its truthfulness and great practical utility, and who consult the phrenologist for the benefit to be derived from his counsel. They bring their children to him that they may learn their strong and weak characteristics; how they should train them that they may secure the most harmoniously developed characters; and upon what pathway in life they should be started that their efforts may be productive of the greatest advantage to their fellow-men, and the source of the greatest profit and happiness to themselves.

They accept the phrenologist's teachings as to temperance, exercise, and health, and the

regulation of all their mental powers according to the laws which the Creator has imposed upon their nature, that happiness, their being's end and aim, may be secured.

Men may decry Phrenology; they may talk flippantly of craniology and bumpology; and they may jeer at the phrenologist as a peripatetic mountebank, but the facts and principles of the science remain, and the laws which it promulgates never cease in their operation.

We may glide gaily over the water in our pleasure-boat, and merrily joke about the dangers of the deep, but whirlpools, shoals, and hidden rocks nevertheless exist, and it is not well to ignore them. He who practices Phrenology in the spirit of its teachings, has

a field as broad as human nature itself; a foundation upon which he may build with the full assurance that it will firmly support all that can be reared upon it.

Let the teachers of the science stand up in the pride and dignity of which their vocation, if truly followed, makes them worthy! The principles of Phrenology are founded in nature, and can not be overthrown. They will grow and gather strength as the years go by. And when, in the full maturity of a vigorous manhood, this science shall stretch forth a helping hand to every struggling child of humanity, it will cherish in grateful recollection the memories of those who, in its youth and opening manhood, had the courage to be its advocates.

THE TEACHER.

BY HON. J. A. GARFIELD, M.C., OF OHIO.

WE publish from the Cleveland *Leader* a part of an address, recently delivered before the Trumbull County Teachers' Institute, at Warren Ohio. It will be seen that the distinguished statesman recognizes the importance of knowing "how to read character." We commend these suggestions to *all* teachers.

He opened his discourse by saying that he heartily approved of the objects and workings of the institute, and that his sympathies were with the teachers in their noble work.

The feature of education that I shall discuss, and which may seem strange to many of you, is the power and influence of the teacher over the scholar. Were I to begin my education again, with the privilege of choosing between two classes of education, one consisting of a magnificent building in which were stoical professors, numberless books, and a systematic but lifeless routine of study; the other a shanty in which is a noble-minded man, of large soul and a generous, warm nature, I would say give me the latter. It is the words and actions of men and women that educate more than text-books. I would not say a word against the work of the Institute; it is necessary and good so far as it goes; but you may write down all the teachers who fail and then examine into the cause of failure, and you will find that it is not from a lack of book knowledge, or a knowledge of studying out a lesson, but a lack of

KNOWLEDGE OF HUMAN NATURE;
they lack gumption. In order to be a successful

teacher you must learn to read character and understand human nature. The trouble is, teachers are chiefly concerned in studying books and not to know the scholars to be taught; are only studying how to use the tools to the neglect of the important qualification of knowing the material upon which they are to work. Some of you will probably go into your school-rooms this fall, and on the first day of school, as you make a superficial observation of your scholars, you will say: These scholars are just like the ones I had last term; are of the same grade and age, and you will commence running in the old groove. This is a great mistake. Of the myriads of beautiful flowers that adorn the earth

THERE ARE NO TWO ALIKE;
so it is as regards children; there are no duplicates in God's creation. Every child that comes into this world is a new combination of elements. Your first and most important duty is to study the nature of each scholar; study the characteristics that are peculiar to each, that you may know how to awaken their nobler emotions.

I believe there is no profession in which there is so much danger of a shriveling up in intellect and powers as that of teaching. I assign as a cause the fact that teachers are too apt to imagine that they have learned all that is necessary for them to know. They realize that they are a little in advance in studies of those around them, and make little or no effort

to develop the mind. They have reached the maximum in their education and are looking down upon the scholars around them. They are lords of a few books, and soon become lords of nothing else. I would say to all such, study the volume of nature that lies open before you, and try to solve its mysteries. Learn to think and impart knowledge without the aid of books, More practicability and originality is what you want.

MAKE YOUR STUDENTS LOVE YOU.

I urge you to secure the warm friendship of your scholars. Learn all those leading events in the life of each that would be likely to affect their nature, and give them to feel that you are in sympathy with them. In my judgment these are things that should be studied far more than they are. I would suggest this as a method of testing teachers: Let me see your roll. Reading the names, one after another, I would inquire, what kind of a boy is that? what kind of a girl is that? and not alone how far have you gone in geography, arithmetic, &c. Your first duty is to learn the peculiarities of each scholar, gain their affection and confidence, and the work of educating them becomes pleasant and easy. According to my theory a blind man could not be a good teacher.

PHYSIOGNOMY.

The teacher must watch the face of his scholar and mark, through the expressions of the eye and countenance, how they are affected by what you say. Work more upon the student and less in books.

Another fault is this: Some teachers take delight in muddling a scholar. For instance: I have seen an earnest scholar at the black-board. He is, by close attention and study, working his way up through an intricate prob-

lem in mathematics. His countenance is all aglow with the thought that he will soon be master of the problem. But just as his hope is about to be realized the teacher purposely throws in some question that muddles his thoughts. His eye glazes, his ambition leaves him, and he falls back to where he began,

DISCOURAGED.

Such a teacher as that ought to be knocked down.

Teachers are apt to place too much importance on dignity. Remember you can not "put on" dignity so as to deceive even a little child. You are liable to make mistakes, and there may arise questions you can not answer. In such cases always be free to acknowledge the fact. To know the best method of getting the lesson into the minds of the scholars is of more importance than a knowledge of how to prepare the lesson. After you have learned a thing you have a greater work to learn how to impart that knowledge to others.

OBJECT LESSONS.

Object teaching is something that should be practiced as far as possible. The acquisition of original knowledge is the great want in the education of our day. Almost all our knowledge is second-hand, and we drink it in with but little if any exercise of our thinking and reasoning powers. The greatest difficulty I had in teaching was to create in my scholars such a hungering and thirsting after knowledge as would lead their inquiring minds to encompass thoughts and ideas not in the range of mere book study. I believe the Kindergarten system is a good one, because it is designed to make the student think, and study out knowledge. I have placed my boys in one of these gardens, hoping that they may reap the advantage of that system.

FIVE GREAT WARRIORS OF EUROPEAN HISTORY.

FREDERICK THE GREAT.

FREDERICK II., of Prussia, surnamed "The Great," son of Frederic William I. and the Princess Sophia, daughter of George I., of England, was born in 1712. He was early instructed in military affairs, and subjected to a rigid system of education by his harsh and irritable father. An attempt to escape from the kingdom resulted in the imprisonment of the young prince, and, it is said, that Frederick William in his anger would have caused his execution had

not the kings of Sweden and Poland interceded in his behalf. After being released from prison he retired to Ruppín, where he remained chiefly occupied in literary studies and associations until his father's death in 1740. Scarcely had he ascended the throne when he gave evidence of energy and ability as a legislator and soldier. Taking the field against Austria, he gained the victory of Mollwitz. A second victory made him master of Silesia. Another war following soon after,

Frederick prosecuted with success until its close, in 1745, Prussia being the gainer by a considerable increase of territory. The celebrated Seven Years' War opened in 1756, by Frederick's invasion of Saxony. In this great contest he had arrayed against him the most powerful nations of the continent, France, Austria, Saxony, and Russia; but such was his celerity of movement, so splendidly organized his military system, so fertile his invention of resources, so unbending his courage, that he maintained his ground against the armies of his foes, and kept the provinces won in his former wars.

ry of the Seven Years' War" are probably his best compositions. He wrote, strange to say, almost entirely in French, his early education having made a Frenchman of him in his ideas and prejudices. He died Aug. 17, 1786.

The establisher of Prussian greatness was a man of strong feelings and decided character. His very broad head accounts for his remarkable physical and mental activity, and his prominent forehead gave him that astonishing perception of affairs which enabled him to administer intelligently in the most serious of military or political emergencies.



In 1772 he shared in the partition of Poland, obtaining the best slice of that unfortunate country. In 1779 the treaty of Teschen added Franconia to his dominions.

Although his military campaigns were on a large scale, they were managed with so much cleverness as to leave no heavy debt to tax the resources of the nation. He was scrupulously economical in his household, and in all the departments of his government, while toward his subjects, aside from his warlike measures, he exhibited the spirit of liberality and kindness.

Frederick was a writer of much fluency; his "Memoirs of Brandenburg" and "Histo-

WALLENSTEIN.

Among the many distinguished military leaders of the memorable Thirty Years' War, he who is entitled to the first place is Albert Wenceslas Eusebius Von Wallenstein. He was born in Bohemia, Sept. 15th, 1583. Having completed his education, he entered the imperial army. By marriage and inheritance Wallenstein became very wealthy while yet a young man. During the Bohemian insurrection he sided with the emperor, and won high reputation and honors for his bravery at the battle of Prague and elsewhere. In 1625 Wallenstein raised and equipped an army of over 50,000 men at his own expense,

and marching against the combinations of the northern and western powers, completely defeated them, and relieved the emperor Ferdinand from threatened misfortunes.

Jealous of his great successes, the emperor dismissed Wallenstein from further service. The latter retired to his estates, but was afterward entreated by Ferdinand to resume his sword in the defense of the country. While engaged in operations defensive and aggressive against the Saxons and Swedes combined, a conspiracy was formed at Vienna for his assassination, which was accomplished at Egra, Feb. 25, 1634.

Wallenstein was a tall, thin, wiry man, with brilliant eyes and reddish hair. Of a most enthusiastic temperament, he pushed with all the energy he could bring to bear whatever scheme interested him. He loved domination, and could not brook interference.

PRINCE EUGENE.

Francois-Eugene de Savoie-Carignan, better known as Prince Eugene, was distinguished alike as a warrior and statesman. He was born at Paris, October 18th, 1663. He was intended for the Church, but the banishment of his mother, a niece of Cardinal Mazarin, to the Netherlands by Louis XIV., led him to enter the service of the Emperor Leopold in his operations against the Turks.

In military life he developed splendid talents as a soldier, and attained so high a position that the French monarch sought to secure his return to France by the most flattering offers; but without success. In the war against France in 1691 he took an active part, and commanded the imperial army in the Piedmont campaign. Subsequently he commanded the army of Hungary in the war with Turkey, gaining the famous battle of Zenta, in September, 1697, where the defeat of the Turks was most crushing.

In the war of the Spanish succession, Prince Eugene commanded the army of Italy, and afterward took the command of the imperial army of Germany, which, allied with Marlborough, defeated the French and Bavarians at Blenheim, in August, 1704. This success was followed up in Italy with other victories, until the retirement of England and Holland from the coalition so weakened the German side that a series of disasters led to the peace

of Rastadt. In 1716 we find him again fighting the Turks with great success, and after the victory of Belgrade he returned to Vienna, where he was given most responsible duties in the Austrian government, and exhibited brilliant capacity in their administration. He died on the 21st of April, 1736.

Prince Eugene was rather short in stature and spare in feature, with a strong nose and sharp eyes. His head was of the high, ambitious, dominating type, and his temperament being exceedingly active, gave him remarkable mental quickness. He was very simple in dress and general habits, and kind-hearted and sympathetic.

GUSTAVUS ADOLPHUS.

Gustavus II., otherwise known as Gustavus Adolphus, son of Charles IX., and grandson of Gustavus Vasa, was born at Stockholm, December 9th, 1594, and succeeded to the throne of Sweden in 1611. Soon after his accession he declared war against Denmark to recover certain territory which the Danes had wrested from Sweden, and which were needed for direct communication *via* the Baltic Sea with Eastern Europe. In this effort he was successful after a year's campaign. Next he turned his attention to the Russian war, and prosecuted it with much vigor until the peace of 1617, when a settlement of the boundary between Sweden and Russia included the site of St. Petersburg. In 1621 he commenced a war with Poland, which continued until 1629, when a six years' truce was concluded, during which a treaty of peace was signed, resulting in a considerable gain of territory to Gustavus.

After a further interval of peace, which Gustavus utilized in promoting measures of reform and improvement among his people, his military spirit pushed him into the paths of war again, and in 1630, at the head of about 15,000 men, he entered upon that career in the cause of Protestant Germany, which made his name so famous. He gained victories over greatly superior forces, commanded by such soldiers as Tilly and Wallenstein. But the impetuous northern king was destined to be cut short in his career at the battle of Lützen, where a contingency of battle exposed him to the fire of the enemy, and he fell, covered with wounds. His Swedes, rendered desperate by his death,

fought so furiously that the imperialists, although they had just been strongly reinforced, gave way, and retired from the field in disorder. The spot where he fell is now occupied by a noble monument erected to his memory by the German people.

Gustavus was an aspiring and adventurous character. His portrait reminds us of the prevailing type of the great naval discoverers of his age. His high head also shows a strong devotional sense.

OLD DESSAUER.

Prince Leopold I., of Anhalt-Dessau, or, as he became afterward known, Old Dessauer, was born on the 3d of July, 1676, and through his great firmness, humanity, and valor became one of the most popular princes of his time. In 1688 the Emperor of Germany chose

him as the chief of a regiment of knights, and later he entered the Prussian military service. After he took charge of his own province, in 1698, he married, to the wonder of all Europe, the daughter of an apothecary in Dessau, who was elevated by the emperor to the rank of a princess in the empire. As regent of his province he aimed to improve the condition of the people, but showed a slight tendency to tyranny. His manner was rough, but he was upright in his actions. He died on the 7th of April, 1747.

His portrait reminds one of that of Goethe, and combines the elements of aspiration, enthusiasm, and refinement. He was evidently an optimist, and sought to realize in the conduct of his own affairs his lofty ideas of social reform and human capability.

AGRICULTURE AS RELATED TO CIVILIZATION.

AGRICULTURE is the fountain-head of civilization. It is the foundation of all wealth, the motive power which transforms empires and changes the course of peoples. God made agriculturists of his ancient people. Among the ancient Egyptians and Indians the priests and soldiers possessed the land. The priests constituted the first caste, the soldiers the second, and the cultivators of the soil the third. The soldiers succeeded in raising themselves to an equality with the priestly condition. In Egypt the soldiers possessed about six acres each near the Delta of the Nile, where, in time of peace, the fertility of the soil was made to yield a most luxuriant vegetation. The king's vestures and the priests' ephods were manufactured from flax grown in the valley of the Nile. Under the microscope the nearly-decayed winding-sheets of the mummies show the traces of flax. To this valley came the surrounding nations to buy drugs and leguminous vegetables. In those remote ages of the world's history, agriculture was a source of immense wealth. Nimrod, the mighty hunter, could have built no Babylonian empire and no Babylon without the resources drawn from agriculture. There would have been no need of Tubal Cain instructing artificers in the production of brass and iron implements if there had been no agriculture to support

this new industry. When we consider the great works which attest the grandeur of Egypt, we are led to believe that the Egyptians possessed a masterly system of cultivation of the soil. The products of the soil reared the mighty pyramids. To build Cheops it required the labor of 100,000 men forty years. The pyramids could have been built only by a wealthy nation, supported by a thorough tillage of the soil. The Temple of Diana, at Ephesus, which was 220 years in building, the temples and the walls of Babylon, and the temples of Thebes, bear witness that agriculture was one of the leading vocations in ancient times.

Carthage was developed and raised to a powerful nation by her great attention to agriculture. At the time when the Romans invaded her territory and laid waste her lands, they saved nothing besides twenty-eight volumes on agriculture.

Sparta flourished under her system of agriculture; but when Lycurgus enacted laws prohibiting all citizens from laboring in the field, and left this work to slaves, she declined in greatness. At the Olympic games some of the Grecian states exhibited agricultural products.

China flourished two thousand years ago under a masterly system of agriculture. The cotton plant was there cultivated before the

Western Continent was discovered by Europeans. There the silk-worm was fed before Solomon built his throne. Around Shanghai is the garden of China, which embraces 50,000 square miles, and has been cultivated from time immemorial. China to-day supports a denser population than any other nation by her knowledge of agriculture. Long before the Romans appear in history, Italy was the most cultivated country of Europe. Where the Pontine swamps exhale their malaria was once populous cities, and the swamps were fertile lands, made habitable by canals and dykes, by the same system practiced by the Etruscans to render fertile and tillable the marshes of Lombardy. At that time Latium stood at its zenith; but when attention to the cultivation of the soil was neglected, the nation sank, never to rise. Seven hundred years before the Christian era, the Romans emigrated toward the Black and the Mediterranean Sea, because their states had become poor through a bad system of agriculture.

At the battle of Platea the Spartans sent forward 8,000 soldiers against the Persians, but one hundred years later, according to Aristotle, that people could not enlist 1,000 warriors. One hundred and fifty years later Strabo says that of the one hundred cities of Laconia there remained but thirty. This depopulation was the effect of permitting agriculture to decline.

Julius Cæsar saw the results of a wrong and neglected system of agriculture, and endeavored to make reparation by dividing the barren Campanese lands among 20,000 poor citizens. Under Augustus Rome could not enlist men sufficient to make two legions. Three hundred years after Augustus, at the time of Diocletian, the free peasantry ceased to exist, and their place was filled by serfs, and then colossal Rome entered upon her course of decline.

At one time in the world's history Spain was the great power. Livius and Strabo relate of Spain's fertility and of her abundant harvests. Under the reign of Abd Errahman III., Mohammedan Spain sustained a population of 30,000,000. Tarragona, the second city of the empire under the Romans, had 1,000,000 inhabitants; under Abd Errahman III., it contained 350,000; now it con-

tains but 15,000. The fanatical Philip II., and his successor of the same name, struck the death blow to agriculture by enacting iniquitous laws. By these measures 800,000 Moors, men and women, old men and children, were compelled to leave the land of their birth, their blooming fields, and the houses their own hands had built. The flourishing plains of the south soon became a desert, agriculture decayed, and then trade stagnated. As a result, prosperous villages were reduced to ruin, towns once animated by commerce became depopulated, poverty and sloth seized the once rich and happy country, the departed splendor of which is still attested by magnificent ruins. Thus does history show that where agriculture holds the first place in a people's affairs, there wealth and progress advance; that wherever agriculture is abandoned, there national decay begins. The same grand truth runs through all nations that agriculture is the source of all wealth, the fountain-head of civilization. As ancient nations grew rich, and then permitted agriculture to decline, so they became demoralized, idle, vicious, and poor; relapsing into barbarism, or vanishing entirely from the face of the earth.

England, at one time the boasted mistress of the seas, thrives by her skill in the art of cultivation. England grows abundant crops on the very fields that fed Saxon Harold and William the Conqueror. The agricultural productions of England are \$1,000,000,000, coming from 50,000,000 acres. The most powerful nations at the present time are those which have derived their wealth from the soil. The experience of the past should be the guide of the future. The American farmer should take pride in his vocation, the foundation upon which our national wealth rests. The nation should foster agriculture and break down all barriers which retard its advancement. History furnishes a warning to those that would let agriculture decline. Rome was once the proud mistress of the world. Her sails floated on every sea, and her products of industry were known in every mart. That she had attained great power the ruins of her cities and palaces amply attest. Yet, by this inevitable law which brings ruin to nations that abandon agriculture, or pay partial attention to it, Rome fell.

The land of Palestine is also a waste and barren country. The noted Sea of Galilee, where the ensigns of Israel, and subsequently of Rome, proudly floated, is deserted, and its borders have become quiet as the wilderness. Jerusalem, the stateliest name on the pages of history, has lost her importance, and is now the abode of paupers. Her temples,

once her glory and pride, are in ruins. Indeed, that whole country, which was the cradle of civilization, has become impoverished, and has relapsed into barbarism. This transformation was brought about in a great degree by the abandonment of agriculture, the source from which wealth is derived.

DARIUS H. PINGREY.

LITERARY SHARKS.

PROF. MORSE, in his amusing as well as instructive lectures upon natural history, has frequently surprised and delighted his audiences by the inimitable manner in which he portrays the relationship between the different orders of the animal kingdom.

In none of his blackboard sketches has he more frequently been met with laughter and applause than that in which, by a few rapid, transitional strokes, the fins of the fishy tribe are transformed into the arms and legs of the biped—man.

One is astonished, after some clever individual has dropped a seed-thought of this kind in his brain, to discover, by pushing the thought somewhat farther upon his own responsibility, that the similarity between the upper and lower orders of creation does not cease with the mere resemblance of fins to arms and legs.

A shark is a shark, whether he flops his fins in mid-ocean or, propelling himself on upright locomotive appendages, manages to find his way into your editorial sanctum, and, dashing the spray of credulity before your mental vision, succeeds in depositing with you an article which you are assured, the moment he is gone, he could never, by any possibility, have written. This class of shark (which may be either masculine or feminine) is really least dangerous of all; you come to know his step after awhile, his loud braggart manner, his persistent determination, and you are soon able to convince him, in spite of his unceasing flop, that you appreciate him for all that he is worth.

Then comes the quiet shark, who appeals to you through the post, and whose accompanying MSS. is well and legibly written, which fact in itself is always a strong argument in its favor; the article is apt to be a really fine one, always moral, and not infrequently religious in its tone; you discern the quality of talent, if not of genius, in the author, and perhaps congratulate yourself upon the possession of ex-

traordinary discriminating power. But if deceived now you will never be again; you know before many days have elapsed, by the various little breezes which blow upon you from different quarters, that all currents of opinion are set in one direction, and that—to stigmatize the author as a shark. You have paid for the article, it is true, but the wide-open mouth and long, sharp teeth, which were not afraid to bite into the huge substance of, perhaps, an immortal reputation, may yet be exposed to the public whom they have offended.

The newspaper shark is one with which we are, perhaps, most familiar. He never hesitates to grasp at and gobble up whole columns of matter, which he inserts in his own sheet with quiet and dignified reticence, without even the faintest recognition of acknowledgment, thereby giving to himself all the benefit of a doubt in the matter as to who was the original producer of the article. It is astonishing to what sublime heights indifference to calumny may carry a man. The consciousness of superiority, and of a reputation unsullied and unquestioned, admits of enormous encroachments upon the public confidence. Let all small vessels stand aside when one of these huge sharks has the right of way! If they appropriate that which belongs by right to another, why it is simply because they are sharks, and 'tis their nature to."

The book shark is quite an ordinary species of this same family. He filches characters entire, and builds himself up on another man's foundation. He follows closely in the wake of success, and the instant a good, live book is thrown overboard, he catches at the plot—the main idea—and, stringing it together with some loose verbiage, manages to launch it into the market before popular interest has died away in relation to the theme. Witness Dickens and his numerous imitators; "Uncle Tom's Cabin," and its would-be followers; "The Gates Ajar," and the literature it evoked. And

these are but examples of numerous instances which may be recalled within any man's lifetime. This class of shark succeeds better than the generality, as, being somewhat shrewd, he is able to catch at his opportunity.

Then there is the shark who understands making over and remodeling another man's opinions. He would have been a good dress-maker had he turned his attention in that direction, for he has the faculty of making old things appear as new. He never scruples to take an article from a paper or magazine, and, throwing over it the drapery of a few extra words and sentences, he sends out to the world the same facts, the same ideas, the same body so disguised that even the originator himself might very naturally put the question, "Is it you or I?" As a rule, this class of shark is a clever fellow, gifted in many directions; he understands the art of appropriation; and could you stand behind the door while he is in conversation with another man, you would be surprised to hear your best and wittiest sentences given with a tone and gesture well calculated to produce the effect of originality. You have noticed—if you have noticed him at all—that he generally wears his mustache so pointed and arranged that it answers nicely for quotation marks. Without doubt he has thought of this himself, and we mention it now to save him the trouble of alluding to it.

And what shall we say for the sharks who have claimed for themselves the authorship of "Beautiful Snow," "Nothing to Wear," "Milton's Blindness," "Betsey and I are Out," etc., etc.? Montaigne says he "has as clear a right to think Plato's thoughts as Plato had himself," and doubtless it is after the same manner of reasoning that so many excuse themselves, not only for running in the same channel, but in the very same groove of expression. The man who gathers up the choice thoughts of others and presents them to the world, is worthy the world's gratitude, but not when he assumes to palm them off upon a credulous public as his own.

There is something so singularly fascinating to certain individuals in the thought of a literary career that they are willing to resort to any means, fair or foul, by which they may attain it; but no bubble ever collapsed more quickly or more surely than that man's reputation which is built upon appropriated or stolen intellectual capital. Such fraud can not escape the mental acumen which will be sure to be directed toward it; and certain, sooner or later, to detect every subterfuge by which it seeks to

screen itself. Many a man who would think it wrong to pluck a flower from another's garden, appears to consider it no violation of his moral conscience to gather the ripest, rarest blossoms from the realm of another's fancy and appropriate them to himself. By a false education we have come to regard external possessions as more exclusively his than those which lie within him; as if all that a man has, all that is absolutely his own, does not, so far as this world goes, perish with him; by no power of his can he impart it; by no will, however strong, can he invest another with those qualities which belong, by divine right, *solely to himself*, and which are more sacredly his own than any of those external possessions which we are wont to regard so reverently.

There is another literary shark whom we had well-nigh overlooked. Not content with seizing what he may devour upon our own shores, he reaches across to the opposite coast, and, snatching from the press the unbound pages of a celebrated author, or choice pictorial plates, he manages to appropriate them to himself with such rare and consummate skill, as well as such calm confidence, that scarce any one stops to question the liberty of such a proceeding. It is a very dextrous piece of work, no doubt, and it may be right since there is no international copyright law, and the returns must be exceedingly satisfactory, considering that such matter costs nothing; but it illustrates admirably the shark theory, and shows that there is small difference, after all, between limbs and fins, however much we may have doubted it at the outset. J. A. WILLIS.

—♦♦♦— "A NEW COLLIER'S CANDLE."

AN ingenious and useful contrivance thus designated has been introduced in England. It is intended as a substitute for the ordinary tallow candles, or small open oil lamps at present used in collieries, against which there are great objections on account of the poor light they give, the great waste attendant on them, and the expense they involve. The new "candle," which is in fact a lamp burning "colzalene," resembles a metal bottle with a conical top, through an opening in which the wick passes. The wick is composed of cotton and steel wire. It certainly gives a very superior light, and, we are told, at one-fourth the cost of tallow candles. With care it will last for years. The wick is permanent, but if it should require renewing, being only half-an-

inch long, it can be easily replaced. A staple is supplied with each "candle," and this, passing through a suitable box attached to the candle, serves, when driven into a wall or prop, or into the ground, to support the candle in the place and in the position required. When trimmed, the patentees state the "candle" will burn steadily for ten hours or more, giving a

brilliant flame, purer and whiter than ordinary gas, with a very high illuminating power, the cost of which does not exceed one half-penny for ten hours, one gallon of "colzalene" being sufficient for fifty "candles." A small tin shield may be fitted upon the neck of the lamp, so as to prevent the draught blowing the flame about.—*Coal Trade Journal*.

THE PHILOSOPHY OF HEADACHE,

AS SUGGESTED BY A GLANCE AT THE SYMBOLICAL HEAD.

I SEE it! I see it! I wonder no more
That the head of man aches, through his ten and
three-score.
I marvel, indeed, that it ever is quiet,
Containing such manifold causes for riot.
Consider: all over the skull there is din,
And, bless you, how could there be quiet within?
There's the man and the donkey, forever at war,
And beneath them, a trifle, Niagara doth roar.
There is he of the roast beef, and she of the lyre,
And the hen and her chickens, the hawk coming
nigh her,
What with eating, and playing, and calling for aid,
And smiling, and singing, and being afraid,
And counting one's money, anointing the sick,
Perusing the heavens, and twisting a stick,
What head would not ache, and what brain would
not reel,
'Neath the cataract's roar and the whirr of the
wheel?
The tramping of horses, the fighting of men
Performing, repeating, enacting again.
From morning till evening, from evening to morn,
All the weight of this tumult by man must be
borne.
And think of the battles and heartaches that there
Each day are recurring beneath the smooth hair.
And the actual "heft," if so I may speak,
That we carry where often we are the most weak;
There's a book on one's forehead, a bear on one's
ear,
Two mules and a turtle, a fox and a deer;
A babe that is crying, two men under trees,
A girl cleaning house and a man on his knees;
And anchors and figures, and stars and rainbows,
And peacocks, and people out airing their clothes.
There's a lesson of patience for one who will stand
In front of the priest, with his robe and his band,
Just think how they've stood, that unfortunate
pair,
Till the veil of the bride was a veil of white hair.
How they've waited, in silence, and wondered,
like you,
If that terrible service would never be through.
Think, too, how the priest, having no more to say,
Has thought to himself, "Will I n'er get away?
I have made of these two either saint or a sinner;
I don't want my fee, but I do want my dinner.

They may stand here all day, if not hungry for
theirs,
But I must have mine, and be back yet for pray-
ers."
Thus wondering and waiting they stand, day by
day,
Till the dinner dries up and the parties grow gray.
From this scene of inaction we turn with emotion,
And quickly mix in where is noise and commotion.
Here's a man painting pictures and one laughing
loud,
Two men talking business, a prize-fighter's crowd.
There's the judge on the bench, making justice
his end,
And he in his study, the girl and her friend.
Here's the sly little Cupid, and the man strutting
high;
There's the bowing and scraping to friends passing by.
There's a watch and an hour-glass, a star and some
balls,
A man and his wife going out to make calls.
'Tis the weight of all this, and I know it, don't
you;
That causes the head to split almost in two?
Sure 'tis a great mercy they are not allowed
To all jumble up, a promiscuous crowd.
For such headache would come, as was never be-
fore,
If this strange population should e'er go to war.
When I see that fat man, and the turtle below,
And the knife only waiting its errand to know;
When I look at that baby, and think of that bear,
A general uprising occurs in my hair
As I think what would happen should each one be
free
To act as he chose, in the slightest degree.
My head takes to aching as ne'er it has done,
And I feel that already the war has begun.
Come help me, my friends, and be quick with your
skill,
For a headache like this might be one that would
kill.
Give me hartshorne to smell, give me nitre to take,
And hasten some mustard draughts quickly to
make.
For my feet bring hot water, bring ice for my head,
Tight close up the shutters and lay me in bed.

S. B. RICORD.

CIVILIZATION IN INDIA, CHINA, AND JAPAN.

A WAY toward the rising sun stretches the mystic Orient, a region in whose storied grandeur poets and painters have delighted to lead our revels, but of whose realities, unmixed with fairy enchantments and fantastic imageries, we have, until these later times, known but little.

The earliest events of which history gives us record, have occurred in the East, and the march of civilization, of empire, of religion, and even of disease, has ever been westward. The lands where our race was cradled, and where human progress had its birth, remained unchanged for ages; but as the tide swept onward in an ever-increasing wave, it added to itself all which human industry or ingenuity could wrest from nature, and finally came, in its course round the globe, again to its birthplace, freighted with the accumulated wealth of cycles, and the offspring became the teacher of its parent. Slowly, one by one, and with the greatest unwillingness, the nations of the East have been forced to admit the superiority of the West; little by little enlightenment has crept in, making patent what was before wrapped in mystery, and showing revered and time-honored superstitions to be no better than nursery tales; slowly and painfully has the conviction come home to the wise men of the East that their wisdom is foolishness, as seen in the broader light of to-day, compelling them to sit humbly at the feet of those they despised, forget what they had learned from tradition, and begin the alphabet of modern knowledge.

Slowly, I say, and with reluctance, have these truths been owned, and though in most every case revolution has resulted, the world is better for it, and if many lives have been sacrificed for adherence to unfounded theories, other generations have and will bless the day when old things began to pass away, and the first glimmerings of a new era appeared.

India was long the treasury of the world, and while she remained in ignorance, held in the cruelest bondage, that of caste, her thrones were stripped of their gold, her monarchs bartered even their gemmed tiaras and the hoarded millions of their ancestors for worthless foreign goods, and a selfish monop-

oly well-nigh ruined her, but even greed could not keep out knowledge, and now, though no longer independent, she is becoming purified and civilized. No longer ascends the perfumed smoke of *suttee*; no longer are women martyrs upon the funeral pyres of their dead lords; the hungry waters of the sacred Ganges no longer swallow countless innocents as of yore; no longer does the awful "cord and creese" strike terror to the heart, nor cruel and ruthless horsemen sweep in swift circles over the land. Once, indeed, rebellion arose, and a struggle was made to go back, but a firm hand, of necessity firm though not of necessity cruel, held tight the reins, and, like a child, India was punished for her own good, as the issue has shown.

Burmah, whose history for centuries is but that of Schway Dagōn, where, from time immemorial, the white elephants have basked in the royal favor and shared the royal purse; where exist some of the strangest traditions, which seem almost copied from the Scriptures, and where, for long years, Talaings, Kareus, and Burmans were all at war with each other—Burmah no longer presents scenes of cruel conquest and bloody battles, but the people now strive for advancement in science, or seek purer conquests in letters.

The whole of Farther India is changed for the better. Burmah has twice striven to throw off the foreign influence, but the destiny of nations must be worked out, and her efforts have been unavailing. Throughout this part of the world the art of war has given place to peaceful arts. The sword has given place to implements of agriculture. Fields where the black-toothed warriors used to exercise or wield their rude weapons of warfare, are now overgrown, or are made sites for churches and school-houses. In one instance, civilization has been met more than half-way, and no revolution has occurred; but in this respect, the kingdom of Siam stands alone.

China has been unfortunate, and her day is yet to come. Her gates have been forced, it is true, but through them and the breaches plowed by shot and shell, the English have introduced a curse, and profiting by the

stupefaction and moral torpor caused by opium, have hasted to fill their pockets with spoils. No wonder that the four hundred millions who regard the "Lord of ten thousand isles" as their father, who consider themselves of "celestial" origin, and inheritors of heaven's choicest gifts, no wonder that they look with suspicion upon foreigners, and call them "Faukwei" (foreign devil), and quite as little to be wondered at is it that the universal desire of all patriotic Chinamen is, to see the hated foreigner driven away, and the gates of their loved country again closed against all who, with fair words and in the sacred name of friendship, come to waste and corrupt them. Hard as her case has been, it is not without its blessings. Western improvements have found their way among the teeming population of the land. Thousands have crossed the Pacific—an act in direct violation of Chinese law—and have returned after a few years with sufficient wealth to help their friends, and with increased knowledge of the world and what constitutes the proper life of man. Now that the regency is ended and the Emperor ascended the throne, since the old law has been changed in regard to foreign diplomats and the audience question settled, and, more than all things else, since the scheme of Tseng-Quo-Fan, of sending boys abroad to learn foreign science and language, has been winked at by the government, there is hope that China may take her place in the comity of nations without a repetition of such scenes that shocked the world during the opium war.

Of all these nations, Korea alone remains entirely closed, but her day will come as surely as progress must go on, and all countries bear their share of toil in working out the final fate of our world.

But the land with which we have most to do in this article, is Japan. For the past two hundred years we have known literally nothing of this country, and it might have been a much longer time had not a God-given thirst for knowledge torn down the curtains *from within*, and permitted us to view the remains of a gorgeous, worthless past, the fierce vigor of a struggling eventful present, and the glorious possibilities of an all-conquering future. Never before has the

world witnessed, in so few years, a revolution so complete as has been taking place there. A system of feudalism has given place to a liberal empire, an usurped power, held by a vassal house, has returned to the royal line; where religion was kept within certain strict limits, it is now unrestrained. The closest nation as regards intercourse with others, has become most anxious to cultivate foreign friendship; western arts, sciences, and improvements are pouring into the country; lines of steamers connect it with all lands; original costumes are giving place to the European dress; even propositions have been made to remodel the language to facilitate intercourse with the once hated foreigner—and all this has taken place within ten years, a time which is as but a second in the life of a nation.

In order to understand fully the great changes which have taken place, it is necessary to glance over the (ancient) history of Japan and the condition of the country and people under the old regime, for even since Sir Rutherford Alcock wrote his "Three Years in Japan,"* such a total change has been brought about that the empire is hardly the same in any important respect, even the lives of the peasants having undergone more or less of a revolution from the introduction of modern improvements and machinery, and the nobles, who exercised feudal power a few years since, are now stripped of all independent authority, and are brought in immediate contact with the long-suppressed but always acknowledged ruler.

The name *Japan* was unknown to the ancient inhabitants of the country, and as an English word. That by which these islands were first known is of Chinese origin, *Jih Pun*, meaning the place of the rising sun. The Japanese being a much softer language than Chinese, the name was pronounced in it *Ni-pun*; then the Dutch, who were the first real settlers among them from foreign nations, called it *Yepun*, and from this came our word *Japan*. The common appellation among the people is *Däi Nipon*, or Great Japan, a term which has come to be confined to the largest island of the group.

Of the primitive history we have little au-

* Capital of Tycoon.

thentic information prior to the year 1543. As is the case with other isolated peoples, there is some uncertainty connected with the origin of the Japanese, though it is generally supposed they came from China, and I think this view is borne out by the fact of their holding the latter nation in so great respect in many things, and still more so by another fact about which there is no doubt, namely, that in very early times the peninsula known to us as Corea was a part of Japan. Probably, when we shall have access to the old histories of China, we shall learn much more of the country than ever their own histories or traditions tell us. According to the latter, the empire was founded 2,553 years ago by Jirin Tenno, who was of divine origin, and whose descendants have reigned in an unbroken line up to the present day. Between this time and 1543 we have but little information that can be relied upon, though there are many characters which figure in tradition and story in whose honor temples and shrines still exist, but whose deeds are enveloped in as much fabulous romance as those of Arthur and the knights of his table.

About the middle of the sixteenth century three Portuguese merchants, driven by stress of weather, landed in the province of Bungo, which lies in the south, and was ruled over by a prince of the same name. A little later a man named Hansiro, a refugee, escaped from his country and made his way to Goa, a Portuguese settlement below Bombay, on the west coast of Hindoostan. Here he was converted and baptized, and under promise of a rich harvest, persuaded a company of merchants to fit out an expedition to visit his native country.

Among those who started upon this enterprise was a party of Jesuits, who hoped to meet with as great success in religious matters as their brethren in financial. Both were fortunate, and while the traders found such a demand for their wares and so good profits from the sale, that they made arrangements for an annual expedition, the fathers were no less happy in the result of their scheme. The Roman Catholic religion spread so rapidly that in forty years it was known and had disciples in all parts of the country, and several of the most powerful princes

joined in fitting out and sending an embassy and a host of valuable gifts to Gregory III., the then spiritual ruler of the church.

When this embassy returned, after an absence of eight years, Père Valignani, whom the sovereign Pontiff had appointed Superior of the Order in Japan, was doomed to a bitter disappointment; for in 1587 an edict was published from the Kubo-sama, banishing within six months, and on pain of death, all Catholic missionaries, and all the churches, monasteries, convents, schools, and crosses were razed to the ground.

In 1635 all the Portuguese who remained were shut up in a small peninsula called Decima, from which they were finally expelled by the Dutch a year or two later. These latter, in their turn, were not allowed outside Decima, except once in three years, when they were obliged to journey to Yedo with presents to the Tycoon; but this slender hold they retained with characteristic tenacity, submitting to unheard of insults and indignities until other nations opened to them larger privileges.

The man who had brought about so great and sudden a change was the renowned Taiko-sama, the founder of the Tycoonate, and perhaps, next to Jirin Tenno, the most renowned warrior and statesman Japan has ever produced.

The first treaty formed with Japan was forced upon them by Com. Perry, of the United States Navy, in 1854, and stipulated only for kindness and protection to our seamen who should chance to be thrown upon the coasts. The next was formed with a Russian admiral, named Pontiatine, in 1857. But the first commercial treaty was formed by America in 1858, and was followed by others with Great Britain, France, and other nations. These having expired, a Japanese Embassy, with Iwakura at the head, visited the United States and Europe for the purpose of forming new commercial relations and obtaining for Japan such political and social consideration as would promote its advance toward European civilization. The relations of Japan with the United States latterly have been most friendly, and the promise of the future for the great island empire of the far East is of the brightest character.

GRESHAM.

EVOLUTION.

WILL Shakerism, if successful in its missionary designs, run the world out? Will it exterminate the race? Nay. Shakerism is the result of Evolution, the fruit of the tree of Humanity—orderly generation and prospective regeneration. The law and the prophets were until John. John, the last and greatest of the prophets, baptized Jesus with Christ Spirit, and he became a Christian. Then the kingdom of heaven was preached, and all men progress toward it. All born into this world die. All who die unresurrected from the generative order will, in some of the hours of eternity, become Shakers. If right for some, while in the body, to rise in the resurrection order, is it wrong for all others not to so rise? Or, if right for the many to live and perpetuate life, is it wrong for the few not to propagate? Is there any law of God under which to abstain from physical parentage as a right and a duty? or can a man or woman live a celibate life in thought, word, and deed, and be a perfectly developed human being—comfortable, useful, and happy? Can a man or woman become to the highest degree spiritualized without refraining from Amativeness on the physical plane? May flesh and spirit be united and constitute Christian husband, wife, father, mother, brothers, sisters, sons, daughters, houses and lands on the earth, as in Protestantism?

If generation be right, *per se*, is celibacy wrong? If celibacy be right, *per se*, is generation wrong? Or are both right—each in its own order, being different stages, phases or cycles of human progress under the law of evolution? Is there but one plane of being in this world—one heaven and one hell in the next? And at death do all go to one or the other? If so, will children who die before and after birth, with no developed character, having done neither good nor evil, all be in a lake of fire and brimstone for eternity? Or will they be in a paradise of glorious felicity, for which they are equally unprepared, and of which they are quite as undeserving? Are the millions of heathens, so called in theological and unhumanitarian contempt, all consigned to the aforesaid lake?

The principal difference between marrying, fighting, private-property-holding Christians and these heathens consists in points of belief, not in their lives.

Comparing the Trinity, atonement, vicarious sacrifices, physical resurrection, justification

by faith without good actions, etc., with Buddhist theology, the difference is largely in favor of the latter. Shaker probation after death solves knotty problems and justifies the way of God to man.

How can persons believe right unless they have the will to do right? Condition determines capacity. In physiology persons who eat, drink, breathe, exercise bodily and mental powers to their best perceptions of right to-day, may, to-morrow, see that in all these they were wrong. To receive truth in the love of truth, unbiassed by educational prepossession—to observe facts, gather ideas, compare, deduce, arrange, with the view to build up a system of truthful conduct, is noble. The reverse—using facts, ideas, knowledge to sustain preconceived theory for short-sighted, selfish purposes and habits—is ignoble. Thus truth may be held in unrighteousness, and the grace of God turned to licentiousness, war, and covetousness.

Persecution for mere belief arises from unprogressed self-hood—fear of consequences that might flow from the admission of new truth: as the Roman Catholic priesthood feared the consequences of admitting that the earth revolved upon its axis; as Protestant clergy and doctors opposed Harvey's circulation of the blood, and now dispute the records of geology.

MOUNT LEBANON, N. Y.

F. W. EVANS.

[Elder Evans tells us about the three orders above, but when the Shakers seek recruits from among the world's children do they stop to inquire to which of these orders said children belong? Or, do they undertake to choke down or crush out the generative principle in one and all whom they take into Shakerism? In other words, is it not equivalent to emasculation for a man to become a Shaker, and to the barrenness of a dry fig-tree for a woman to join that body?

That certain persons may become Shakers without violating God's natural laws—persons incapable of parentage—may be true; but do the Shakers confine their selections to this class? If not, why not?]

MR. H. M. STANLEY, the discoverer of Dr Livingstone, says that "no one who needs the support of brandy is fit to travel in Africa, as a drunkard can not stand a tropical climate." Experience has also proved that drunkards here can not stand our temperate climate, so that they are really badly off, unless Greenland may prove congenial.



NEW YORK, DECEMBER, 1874.

"ALL ASHORE."

WHAT! have we so soon come to the end of our very pleasant journey? And is it a year since we bought our ticket and set sail in the good ship PHRENOLOGICAL JOURNAL? How short the time seems! And yet it is just TWELVE MONTHS ago that we embarked for a voyage of exploration around the world on this sea of knowledge. *All* have learned a little; many have learned much; some have laid foundations in good principles which will insure future usefulness, prosperity, success, and enduring happiness. They will date their *start* in life to encouraging words first seen in these pages.

But we must part company now—at least for a time—and each will recount his experiences, "take stock" of his effects, and decide on his future course. One goes to California, Mexico, Texas, Florida, the Rocky Mountains, or to the Old World, and while thus "on the wing" he will drop his old friend and monitor, the JOURNAL, and pursue his journey alone. But will he not need it, in its fullness, on his return? He may have it sent to a friend, and find it on hand to welcome him when he settles.

Others will rejoin us; indeed, we have become *a necessity to each other*. They miss us when we fail to put in an appearance at the expected time. And, when turning over the pages of our subscription books, we miss the familiar names of those who "drop out," or who do not renew. Some die, and go to their reward. All should come daily one step nearer heaven. We are ripening out of the body into the spirit, and shall, ere long, finish our journey and our duties here. But while we remain we will work, to the best

of our abilities, in the interest of our fellow-men.

So far, we have been generously, even nobly, seconded in our efforts. Words of good-cheer come from readers to encourage us; and we feel that we owe to them a debt of gratitude which our best services may never repay. When these good men and women die it will be said of them that they left the world better than they found it—better for their having lived in it.

MUST WE PART? This is the last of Vol. LIX., for 1874, of the PHRENOLOGICAL JOURNAL. Many subscriptions terminate with this number. We send the JOURNAL no longer than the time for which it is ordered. Those who wish it continued will renew. Our terms are unchanged—payment is made in advance. A new volume, LX., begins with the new year and the next number. If we now say ADIEU, which means "God be with you," may we not hope soon to say to each fellow-traveler and subscriber of the new year, WELCOME to our books again!

The cause would be no less dear to others than to us, did they realize its importance. All who call attention to it, or induce others to become subscribers, are doing excellent missionary work, from which thanks and blessings are sure to come. Reader, we are in the same boat, sailing for the same haven, and the more passengers we secure the better for them, for us, and for the world. Reader, what say you? "Will you go?"

FAILURE OR SUCCESS IN LIFE.

WHAT are the causes of so many failures in life? Why do so many bright boys and promising young men come to naught? Is it so decreed by high heaven? or, is it by some fault of their own? If it be by their own fault, then *they* are to blame, and their failure is simply the penalty which follows transgression—it is merely the operation of cause and effect. If the failure be through misfortune or some unavoidable calamity, then they are entitled to commiseration. Take one of these failures. Was he the offspring of an ill-assorted marriage? Was he an unwelcome child? Was his father a dwarf? or was he dissipated? Was his mother a silly, fashionable, tight-laced

woman? Did she feed on confectionery and drink strong drinks? He would necessarily suffer for such sinning; and if he fetch up in a poor-house, or an asylum, or a prison, he is more to be pitied than blamed. But if one be well generated, well born, of good, sound, healthy stock, and if, by self-indulgence, idleness, sporting, and self-formed bad habits he runs down and becomes a charge on society, a subject of charity, a pauper, or a prisoner, he *deserves* to suffer. He gave himself the wounds he suffers. He brought the pest upon himself. Let him not charge his fault on Providence.

Success or failure in life is not a matter of chance. It depends on conditions. To a large extent we may be masters of these conditions, and make them what we will. A weak will yields to circumstances; a strong will makes circumstances yield to him. One is *easily* tempted, another resists temptations. One becomes a slave to a perverted appetite, say to a pipe, cigar, or to his cups. Such a man is not fit to be trusted. He can not trust himself. His habit is his master. As he yields to this, so he yields to other equally foolish or sinful practices, and becomes weak in will, weak in moral sensibility, and is no longer his own man and master. He is on the downward road, and is much more likely to make life a failure than the man who has no bad habits.

Here are useful suggestions from a member of the British Parliament, Lord Derby, who is a robust, manly man. He says:

"Take two men, if they could be found, exactly alike in mental and bodily aptitudes, and let one go on carelessly and idly, indulging his appetites, and generally leading a life of pleasure, and let the other train himself by early hours, by temperate habits, and by giving to muscles and brain each their fair share of employment, and at the end of two or three years they will be as wide apart in their capacity for exertion as if they had been born with wholly different constitutions. Without a normal healthy condition there can, as a rule, be no good work; and though that qualification can not absolutely be secured or preserved by any rules, a little common sense and care will go a long way both in securing and preserving it. On that point I would give you these hints: First, That it

is not mental labor which hurts anybody, unless the excess be very great, but rather fretting and fidgeting over the prospect of labor to be gone through; so that the man who can accustom himself to take things coolly, which is quite as much a matter of discipline as of nature, and who, by keeping well beforehand with what he has to do, avoids undue hurry and nervous excitement, has a great advantage over one who follows a different practice. Next, I would warn you that those students who think they have no time for bodily exercise will sooner or later have to find time for illness. Third, when an opportunity of choice is given, morning work is generally better than night work; and lastly—a matter which I should not stop to allude to but that I know the dangers of an over-driven existence in a crowded town—if a man can not get through his day's labor, of whatever kind it may be, without artificial support ["artificial support"—*that* means beer or bourbon], it should be a serious consideration for him whether that kind of labor is fit for him at all."

The slow suicides which are being committed among us by self-indulgence, in various ways, is alarming. Nor do the victims seem to be aware of their numbers or their danger. When broken down they charge it to Providence, or to circumstances, when in truth it was their ignorance, or their willful perversion of God's laws of life and health.

Just here comes in our rights and our duties as good citizens. Is it not our right, is it not our *duty*, to protect each other from falling into the pits of intemperance? Ought we not to write down, lecture down, preach down, legislate down, pray down, fight down, and keep down, this incarnate devil, who is indeed like a roaring lion, seeking whom he may devour? He is lurking in every distillery, in every tavern, in every liquor saloon, in every theater, on every race-course, in every gambling-house; aye, in the cellars of many professed men of God, who make long prayers beseeching our Father in heaven to deliver from temptation, while, at the same time, they are petting, caressing, and nursing the monster, who is slowly and surely gaining in power, and will soon have them in his clutches and by the throat. "O consistency,

thou art a jewel!" Why not cage or kill this lion?

Here, then, are the causes of success and of failure in life. Let each box his compass and steer his craft toward the haven he would be. The fogs, the rocks, and all the dangerous places have been pointed out, and a chart for safe sailing is before you. Mind the lights! Mind the signals of danger! Keep off the rocks! Keep a vigilant watch! Have all sails set! Catch every favorable breeze! And when storms arise—temptations—keep sails snugly furled, and so ride out the storm. A well-manned ship, well navigated, will be brought safely into port, and success crown the effort. Providence favors the vigilant, and helps those who help themselves.

Our bodies, our brains, and our minds depend largely for their growth and development on what we eat and drink. They are well fed, ill fed, or they are starved, and our *characters* become what our bodies and our brains permit them to become. We are coarse or fine, temperate or intemperate, diseased or healthy, ignorant or educated, godly or ungodly, happy or miserable, saved or lost, in heaven or in hell. Whither are we tending? Where do we stand to-day? Let us classify ourselves. Let us look within and see how big the devil has grown. How many bad habits—chains—has he fixed upon us? Are our lives to be failures, or are they to be successful? Shall it be said, "Thou good and faithful servant, enter into the joys of the Lord?" or shall it be said, "Depart, ye wicked, into outer darkness?"

A MERRY CHRISTMAS.

WE do not believe in trying to concentrate *all* our enjoyment or happiness into a single day or a single occasion, but to diffuse our work and our play, our prose and our poetry, all through our lives. In the Old Country, *holidays* are called "red-letter days." Then the people give free scope to appetite; to indulgence in what they call "goodies," including plum pudding, confectionery, wine, beer, porter, ale, and other concoctions. But is this the right way? Would it not be more healthful and every way better, to partake moderately, temper-

ately of healthful food, and to make all our daily duties enjoyable by working with light hearts and willing minds, rather than like unwilling slaves? We are here in this world for a purpose. We **are** human beings, not beasts of burden nor slaves of fashion, passion, appetite. To a properly-constituted human being, every day should be as "a merry Christmas," and his soul should be filled, not with sin and sorrow, but with joy and gladness. Is not happiness the end of existence? Then why not have it all the time? Why not live in it, instead of in the other place?

Reader, let us, you and I, realize that heaven is a *condition*, as well as a *place*, and let us so live as to insure to ourselves, and to as many others as we can reach and influence, the promises of God and of nature to those who are obedient to His mandates. Let us obey and secure the blessing. Let us minister to each other as God, in His goodness and mercy, ministers to us.

"It is more blessed to give than to receive."

If we will, every day shall be to us

"A Merry Christmas."

BLESSINGS IN DISGUISE.

THE trials of life which seem greater than we can bear are often only "blessings in disguise." May good come out of evil? In early Christian times the question was asked, "Can any good thing come out of Nazareth?" We, short-sighted mortals, often deplore conditions which, if rightly used, would tend to our good. We ask that we may escape cares, trials, responsibilities, and even work! Nevertheless, all these things are blessed to our use. And so is adversity, when we have enough grace to accept the situation meekly. "To whom much is given, from him shall much be required." Have you great abilities? rare gifts? great strength? great riches? and will you not exercise them in the interest of the less fortunate and the poor? Curses will come on you and on yours to the seventh generation! You *must* use your talents, strength, abilities, riches, or they will corrode and bring evil on their owner.

Welcome the duties of life, the cares of

life, the struggles of life, and even the trials of life. They are for your good. Have you lost property, position, influence, fame? It should tend to wean you from life's vanities, and reconcile you to the life to come. Has death separated you from loved ones? Accept the lot, and realize that they have simply "gone before"—that you will meet again. Are you on the brink of another world, just ready to let go of this? Did not He teach you the way? and can you not say, "Thy will be done?" How beautiful is Faith! and oh, how comforting!

Rev. Dr. Armitage is one of our live preachers; he enjoys trips into the country, where he may observe the beauties of nature, and he brings home pretty pictures with which to illustrate his practical discourses. Here is one of them, which also illustrates our text:

"In Scotland last year, while steaming up one of the great lochs, close to the shore, I saw a great bed of water-lilies near the bank, which were discolored with dust from the road running just above them. All their beauty was spoiled. As the steamer passed, a great wave rolled over the lilies, entirely submerging them, and I exclaimed, "Oh, they are all broken in pieces;" but as the wave rolled back the lilies burst again upon my view, riding gracefully upon the waters, radiant with beauty, and white as the driven snow. The only effect of the wave had been to wash away the dust and bring them out in their virgin purity. So with the Christian soul, sealed by God. It can not be destroyed, but the dust of sin that covers it will all be washed away, and it will be made fit to stand and live in God's presence."

It has been said that the best work ever performed by Henry Ward Beecher was during the past four years, while suffering from the sting of persecution. Has not his suffering made him a better man? The fact that it did not utterly crush him, is an evidence of the supporting power of conscious innocence and of Divine grace. "God tempers the wind to the shorn lamb."

In a note to a friend just after the Woodhull attack, Mr. Beecher wrote: "Living or dying, I am the Lord's. He knows it, and I know it. After that it matters little what happens." To him, indeed, it matters little.

His noble work will go on, and his Master will care for him and for it. And sooner or later the world will know the truth. But each of us it concerns deeply that we do not wrong ourselves by misjudging in this issue between a true man and a lie.

"HOW TO DRAW A CROWD."

A LECTURER of some years' experience and of undoubted ability and merits, has never realized his aspirations in "drawing a crowd." He lectures to small and "select" audiences. He would like to reach the masses, and asks how he may do it. We reply:

1st. He must be a good speaker. This implies oratory, and oratory implies both natural gifts—good Language, with Intellect, Ideality, Imitation, Mirthfulness, and thorough discipline. One must have training and practice before inflicting his presence on an audience; must know how to handle *himself* and his subject. All these as a matter of course.

Then one must choose subjects or themes in which the public are supposed to have an interest. If it be on a dry or threadbare topic, the people will not invest their time or their money. It must be fresh—something "taking." Then it must be properly announced—advertised by posters, circulars, in newspapers, and by all proper means.

Among important aids to a popular lecturer are maps, charts, diagrams, globes, etc. When an Arctic explorer stands before an audience with outline maps on the walls, he makes himself more fully understood by pointing out the various routes, bays, promontories, harbors, headlands, etc., than could possibly be done without. So of the astronomer with his planetary system, pictured even in outline, which aids the hearer to understand. A lecturer on natural history exhibits drawings of the animal he describes, be it gorilla, chimpanzee, monkey, or mouse. So of the physiologist, he must have anatomical diagrams, manikins, skeletons, etc. Dr. Wieting, of Syracuse, N. Y., one of the most popular and successful lecturers, who acquired a fortune only a few years ago, had a lecturing apparatus with which to illustrate his

subjects, which cost more than \$10,000. He has it yet, though it is not now in use. He began his lecturing with a few simple crayon drawings, then added a manikin; then another and another feature until he had the best private collection in the world. It was well worth the admission fee charged simply to see him dissect these wonderful structures and to explain the use of the different organs of the human body. When he visited New York, Boston, Philadelphia, Washington, etc., it was enough for him to announce the subject of his lectures and the apparatus with which it would be illustrated, to fill the largest public hall.

Phrenologists who succeed best procure life-like portraits of distinguished or notorious men, including those of all grades of intelligence, with which to illustrate their subject. These, if well selected, prove great attractions to those who have heard of but have never seen the originals. The skulls of animals are compared with those of man, and differences in organization and character pointed out. Light is thrown on many questions by these discussions. For example, what is the difference between instinct and reason? Who wrote the plays usually ascribed to Shakspeare? Is George Francis Train crazy? What of Tilton, Moulton, Beecher? Was Wesley a libertine? Why did the patriot, Arnold, become a traitor? Was Napoleon a murderer? Was Swedenborg a seer? Is there such a mental condition as that called clairvoyance? Can one, by the power of his own will, completely subdue the will of another? What organs or faculties must be prominent in the mathematician, in the actor, inventor, composer, or musician? And how is it that Phrenology indicates what each can do best? A racy writer, like a fluent speaker, can bring enough guns to bear to hit the ten thousand, while the more profound mind may interest but few. As yet the majority of mankind live chiefly in the perceptive faculties, and, like children, they all cry out "Let me see, let me see." Most persons are to be interested and instructed through their curiosity. And *this* is why we must have pictures in books, diagrams and other apparatus in lectures, and playthings for everybody. And this is the way to educate and "draw a crowd."

CHRISTMAS PRESENTS.

VERY soon all good Christians—and some pagans—will be casting about to see what they may select for Christmas presents. Just what may be the best thing for the price to suit the case is what "everybody" wants to know. One will buy a box of cigars, of expensive brand, to present to the man who smokes. Another will buy a costly snuff-box, filled with powdered tobacco. Another will put \$3, \$5, or even \$10 into a richly carved tobacco pipe; and each of the givers will congratulate himself that he is doing a handsome thing. But how much better would be a basket of fruit or a barrel of apples, in which all the family could participate! Another will buy a basket of champagne or a case of other costly wine, and send it to his friend as a Christly—Christmas—present! Another will content himself with a demijohn of old bourbon; another with a keg of lager beer. Liquor dealers count on large orders for the holidays. But are these substances the best for holiday presents? Will God bless them to giver or to receiver? If not, then they are inappropriate. If they do *harm* rather than good, then curses rather than blessings will come of them.

Others, who mean well, but are not yet developed above the animal appetite, will go largely into confectionery. They will buy great quantities of highly-colored and richly-scented candies, with more or less white clay, plaster of Paris, and real deadly poisons in them, to be given to good little Sunday-school children! It will cause sickness in many families, and death in some. But the matter of life and death is in the hands of Providence, "you know," and *we* must not be held responsible. Besides, "children *will* have candies, and *we* can not help it." And is *this* the way you propose to treat the subject? Will you contribute toward a fund to buy poisons to feed little children, and then put the responsibility on Providence or on the wicked one? *That* is "too thin." What is reason given to man for except to be used?

Sensible people will provide something useful, tasteful, improving. A suit of clothes for a poor boy; a comfortable dress for a poor girl; a sewing-machine for a poor widow; a barrel of flour, a few tons of coal, a

quarter's rent, or, in *most* cases, a sum of money to the needy would be the most acceptable present. What would be the use of cluttering up the house of a poor widow with a lot of traps she can not use?

The old-time custom of presenting BOOKS as pleasant remembrancers is still in vogue, and we can think of no stronger testimonial of loving hearts than a present of good books. A year's subscription for two or three of the best magazines would make a nice present. Each recurring monthly number would keep the giver in remembrance. This is practiced to a considerable extent, and we heartily approve the plan.

Little children must have toys. Boys want noisy drums, toot horns, tin whistles, kites, sleds, hobby-horses, etc., and little girls want pretty doll-babies, mimic household things, etc. Santa Claus will bring goodies—let them be ripe and healthful fruits, when possible—for all good children. And are not *all* children as good as they know how to be, or as good as they should be expected to be, considering their inheritance and their surroundings? We pity the poor Shakers, who have no good little children to make happy on these festive days. What should we do without them!

Then let us all get ready for our happy Christmas. *Our* stocking will be hung on the bed-room door. Wonder if anybody will put anything in it! May we be up bright and early to see!

NO MORE PUBLIC SOUP.

TO the poor, "whom we have always with us," the coming Winter promises to be an exceptionally severe season. In this city, fortunately, we have too many wealthy lovers of their kind to allow the poorest to suffer for want of food. We are justly proud of this fact, and while we have no desire to stay the hand of charity, yet, in justice to the needy ones themselves, we must enter a protest against the favorite mode of dispensing wholesale charity, *a la* soup-house, on the ground that it is demoralizing to the recipients, while a large proportion of the worthy poor have too much delicacy or independence to avail themselves of the opportunity offered them. Last winter's experience should teach our philanthropists that wholesale d^{ép}ôts of charity exert a most per-

nicious influence on the poor and shiftless—that the means to aid them are counted on to deter them from undertaking employment, when offered—and that the soup-house is a wholesale thief manufactory. Should this system be continued, we may look, ere long, for an American lazaroni. We call upon our philanthropists and wealthy men to provide the poor with work during the coming season of destitution, and allow them to buy their own soup. This is the only sensible way to deal with our poor—to make mendicants of them, destroys their spirit of independence, encourages laziness, and blunts their sense of honesty. While soup-houses are in vogue, we shall have strikes for higher wages among laboring men, and female servants will be so fastidious in the selection of their situations that it will be an impossibility to suit them. Provide work for the poor—and let them provide soup for themselves.—*Nautical Gazette*.

[We agree with the above exhibit and suggestion. But how to keep working people profitably at work is the question. Employers, like farmers, must have a market for their productions, or they must stop. Better keep employés at work on half time than not at all. This would be real, practical charity in many instances.]

AMERICAN SEAMEN.—The *Nautical Gazette* says: "If the management of the Pacific Mail Steamship Company will carry out the plan as indicated by the items going the rounds of the press, for the enlistment of youths, who shall rise, in regular grades, to the highest rank of command in the service, it will be one of the most commendable steps ever taken in this direction. Mr. Hatch is a man full of brilliant ideas, and many of them, if worked out, as he evidently intends they shall be, will produce results of great benefit to the vessel interest of the nation. We need good seamen and good officers as much as we need good ships, and the man who will aid in perfecting any system whereby the *personnel* of our merchant navy may be elevated is a public benefactor. There are many traits in the character of the Managing Director which we admire, but none more than that which has prompted him to take the initiatory step to give promising boys an opportunity to become first-class seamen and officers. We sincerely trust that his efforts in this direction will meet with a rich reward, and that he may live to see a large body of real American sailors

grow up, whose early training and whose future welfare can be traced to their schooling on the ships of the Pacific Mail Steamship Co."

[We are rejoiced at the prospect. There is no good reason in the world why Americans shall not become the best seamen. Let the lads be properly encouraged and trained. In this connection it is in point to mention that the New York Board of Education, with the au-

thority of a recent State law, have taken measures for the establishment of a Nautical School for the education and training of pupils in navigation. The U. S. Government, in furthering the excellent scheme, has placed a sloop of war, the St. Mary's, at the disposal of the New York Board, and before long she will be ready for use in this new and most beneficial educational enterprise.]

MIND AND BRAIN.

UNDER this title one of our exchanges records the substance of a recent paper given to the public by Prof. Wilder, as follows:

"Dr. B. G. Wilder, in a paper read before the American Scientific Association, criticises the methods of studying the relations between brain and mind. The phrenological method is defective, because anatomy does not show any definite correspondence whatever between the folds and fissures of the brain and the outer surface of the skull, and because the most expert phrenologists often fail to define character by the head. As for the pathological method, which compares brain-lesions with mental phenomena observed during the life of the individual, there is good reason for supposing that peculiar mental conditions may exist without recognizable brain-lesion, and *vice versa*. And Brown-Sequard says that all parts of the brain may, under irritation, act on any of its other parts, modifying their activity so as to destroy or diminish, or to increase and to morbidly alter it. The experimental method, which irritates or destroys certain cerebral regions in living animals, merely demonstrates the existence in the brain of centers of action for different sets of muscles; it necessarily produces abnormal action, and fails to show the relation between brain and mind. Dr. Wilder would follow the example of phrenologists, but employing the brain itself for comparison, instead of the skull, using large numbers, and comparing the two sides. He would employ canine instead of human brains, because of their simple fissural pattern, and the possibility of an accurate knowledge of the mental characteristics of dogs. Better results might be expected from the study of the brains of persons with whom we were acquainted in life, but that is impracticable. Dr. Wilder does not believe in the localization of faculties in different portions of the brain, and inclines to the opinion that a cerebral hemisphere acts as a unit either singly or with its fellow."

In respect to the above we have to say that

those who are inclined to oppose Phrenology generally indulge in very loose and indefinite statements. Dr. Wilder is made to say that "anatomy does not show any definite corresponding difference between the folds and fissures of the brain and the outer surface of the skull." This statement seems intended to mean that the form of the brain is not indicated by the form of the skull; whereas the development of the brain gives form to the skull. We have never supposed, nor stated, that the special convolutions of the brain indicate their minute forms upon the surface of the skull; but our theory is that the size of the brain is the measure of mental power, other things being equal; and that the organs of the propensities are located above and about the ears; and when these are large the head is wide in that region.

We have skulls some of which are one inch and a half wider than others in this region, yet their length is the same. The anterior portions of the brain—what are called the anterior lobes—are devoted to the intellect. In proportion as the forehead is long from the ear forward, is the intellectual development indicated.

It is no more necessary that the folding of the brain should be indicated on the surface of the skull to indicate the size of the brain, than it is necessary that the crooks and corrugations of the bowels should be imprinted on the surface of the abdomen to indicate large bowels, or to show the difference between those that are large and those that are small. Sometimes the abdomen stands out boldly; it is an indication of large and well filled viscera, and *vice versa*.

The same is true with the brain, which is folded and corrugated in a manner similar to

the intestinal canal when lying in its normal condition.

The efforts which have been made by Broca, Ferrier, and Brown-Sequard have just about as much significance in determining the qualities of particular parts of the brain as thrusting a spur into a horse by his rider, or striking him on the flank with his whip, determines the location of the injury to be the source of power to the legs. Poisoning a particular part of the brain, or affecting it with electricity, is apt to extend its influence to all parts of the brain.

They pierce the brain and irritate certain particular parts. And in the case of a dog, because his hind legs are made to indicate the process of running, they think they have found the location of locomotion.

One might as well assert that the end of a cat's tail is the location of the power which opens the mouth and excites the cat to squall because treading on the tail produces this result.

Dr. Wilder is, moreover, made to say "he would employ canine instead of human brains, because of their simple fissural pattern, and the possibility of an accurate knowledge of the mental characteristics of the dog."

We know the character of men better than we do the character of dogs—that is out of our sphere.

Phrenologists know, however, very well that development above the ears in a bull-dog corresponds with bull-dog disposition, in dog and in man. Destructiveness, Combativeness, and Alimentiveness, located in that region, manifest themselves according to their fullness or size in the lower animals and in man.

Dr. Wilder, we learn, "does not believe in the localization of faculties in different portions of the brain." But he knows distinctly that we differ from him in this opinion, and we believe we have had a better opportunity than most people of knowing whereof we affirm in this matter.

Phrenology will take fifty skulls, ranging all the way from the highest to the lowest, and will describe the character which each of the individuals who once owned them was known to possess during life, and so classify them that any man of common observation will readily see the differences in

the skulls, and he will himself be able to classify skulls in like manner in a general way ever after.

As we have said, some men have a head an inch and a half wider above the ears than other men, while the length from the front to the rear may be the same; others have a head an inch and a half higher, while the length and width may be the same.

The trouble with most persons who criticise Phrenology is, that they have not made extensive and careful investigation according to the principles of Phrenology. They are more apt to find a skull or head which they deem to be an exception, and because they can not find waves and lumps on the surface, they think there are no indications of phrenological development; while we take the *radial extension* of the head from the medulla oblongata, and measure the size of different parts, as the size of a wagon-wheel is measured by the length of the spokes.

FAITH OR REASON, WHICH?

THE warfare which has been going on for so many ages between the champions of Reason and the color-bearers of Religion seems to be approaching its climax. Various have been the methods tried for a reconciliation, but fruitlessly. Believing, as we do, that only in Phrenology can be found any definite solution of the differences between them, and that the time is favorable for the presentation of the best thought of those who contemplate human reason and human religious beliefs through the telescope of phrenological principles, we offer a Premium of One Hundred Dollars for the article which shall best set forth the functions and relations of the religious and intellectual organs in mental phenomena.

The articles, to secure attention, should be legibly written on letter or manuscript paper, one side of a slip only being written on, and be sufficient to fill not less than eight pages of the PHRENOLOGICAL JOURNAL.

The manuscripts shall be submitted to a committee composed of Drs. R. T. Trall and Alexander Wilder, and Messrs. Samuel Leavitt and H. S. Drayton for examination, and their report will determine the successful contribution.

All offerings in competition must be sent in before the 1st day of February, 1875.

OUR NEW CLASS.

FRIENDS of the cause will be pleased to know that our prospects for a goodly number of students—all capable men—for 1874, are favorable. Just as we go to press, members are beginning to assemble. We shall have more to say of them in future numbers.

A GOOD SUGGESTION.—"The perfection of the Grange will be reached only when those who have been reared under its influences are intellectual, as refined and as polished as the best class of the inhabitants in our larger towns and cities, without their follies, immoralities, and vices. By joint efforts, through the medium of the Grange, libraries can easily be procured, lectures delivered, and various means

of instruction and entertainment provided at trifling expense to the individual, but of the greatest value to all. Each of one hundred members, by contributing the small sum of one dollar toward the purchase of a Grange Library, would hereby place it in the power of each member to enjoy the advantages of a hundred dollar library, all for the inconsiderable sum of one dollar.

"Such is the value of co-operation. Thus, through the instrumentality of the Grange, do we place in our homes hundreds of good books and scores of conveniences and pleasures which are practically unattainable by the individual."

[It will afford us pleasure to furnish Grangers and others with well-selected libraries at wholesale rates; and this is one of the best ways to aid in building up a society, a State, and a nation.]

AGRICULTURAL HINTS.

Our Wheat Crop.—It would appear, from a long article in a New York paper, that the wants of Great Britain in the wheat line average about 850,000 bushels per week, and America being this year about the only source of supply, we may expect steady prices. In the crop year 1872-3 Great Britain imported about 100,000,000 bushels of wheat, and her estimated requirements for the crop year from September 1, 1873, to August 31, 1874, from foreign imports, have been placed at 90,000,000 to 100,000,000 bushels of wheat. France, usually a large exporter of wheat, has been in the present crop year an importer to the extent of about 40,000,000 bushels of wheat, and Russia, that has had in some previous years as high as 60,000,000 bushels annual surplus wheat for export, had scarcely half the amount from her crop of 1873. The United States in 1873 had a wheat crop estimated by the Agricultural Department at 277,372,000 bushels, which probably, in fact, exceeded 310,000,000 bushels, as about 88,000,000 bushels have already been exported, and 221,250,000 bushels are approximately required for seeding 20,000,000 acres of wheat, and the food requirements of about 43,500,000 people.

The Largest Farm in England is 3,000 acres in extent, and in its cultivation the "four course" system is adopted, 750 acres being devoted to wheat, 750 to barley and oats, 750 to

seeds, beans, and peas, and 750 to roots. The live stock is valued as follows: sheep, \$35,000; horses, \$15,000; bullocks, \$12,500; and pigs, \$2,500. The artificial fertilizers used annually amount to \$8,000, and the entire cost of manures is \$15,000. The oil-cake and corn produced annually amount to \$20,000. The yield of the sheep sells for \$20,000, and this animal is the most profitable stock kept. Pretty good for a little island farm!

Value of Hens and Eggs in France.

—A curious statement has been made and published in a French paper in regard to hens. It reckons the number of hens in France at 40,000,000, valued at \$20,000,000. Of these about one-fifth are killed annually for the market. There is an annual net production of 80,000,000 chickens, which in market yield \$24,000,000. The extra value to be added for capons, fattened hens, and the like, is put at \$2,200,000. The production of eggs is reckoned at an average of 100 eggs per hen, worth \$48,000,000. In all, it is reckoned that the value of hens, chickens, and eggs, sold in the markets of France, is \$80,000,000.

Wet Boots.—The following simple device will rob the cold, wet barn-yard of a slushy winter or spring evening of half its promise of discomfort for the next morning: When the boots are taken off, fill them quite full with dry oats. This grain has a great fondness for damp,

and will rapidly absorb the last vestige of it from the wet leather. As it takes up the moisture it swells and fills the boots with a tightly fitting last, keeping its form good, drying the leather without hardening it. In the morning, shake out the oats and hang them in a bag near the fire, ready for the next wet night, draw on the boots, and go happily about the day's work. This simple recipe, tender-footed reader, will save you much discomfort.

Pillows long used acquire a disagreeable odor. The ticks should be emptied and washed, the feathers put into a bag and exposed to the heat of the sun for several hours. If in the country, where the old-fashioned brick oven is still in existence, it is a good plan to place the bag in the oven after the bread has been withdrawn.

Map Your Farm.—The *Farmers' Union* suggests that every farmer should have a complete map of his farm, with each field, pasture and wood lot, together with all the fences, roads, and ditches, plainly drawn, and either numbered or named, so they can be readily designated. Few farmers can appreciate the real value of one until they have tried the experiment, for with a map of the farm before

you, you can direct your workmen to any part of it without the possibility of their making a mistake. You can plan improvements and estimate the cost at your leisure, instead of spending half a day of your valuable time in surveying the land itself. Any person, with a little ingenuity and patience, can draw a map of his farm. It should be about two feet square, or larger if desired, and drawn upon thick cardboard, to prevent its being torn or defaced. Let our farmers try the experiment, and they will soon learn its value.

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IMPORTANT EVENTS WHICH OCCURRED IN DECEMBER.—Dec. 1. Habeas Corpus restored, 1865—2. John Brown hung, 1869—3. Siege of Knoxville, 1863—4. Thos. Carlisle born, 1795—5. Mozart died, 1792—7. Cicero assassinated, 43 B.C.; Father Mathew died, 1856—8. R. Baxter died, 1691—9. Milton born, 1608; Sumter bombarded, 1863—12. Brunel died, 1849—14. Washington died, 1799; Prof. Agassiz died, 1873—17. Sir H. Davy born, 1779—18. Rev. Charles Wesley born, 1708—19. Rome burned, 69 A.D.—23. Xerxes enthroned, 486 B.C.—24. Stanton died, 1869—25. Christmas day (see St. Matthew i.)—26. Girard died, 1831—28. St. John died, 100 A.D.—29. Gladstone born, 1809—30. Order of Jesuits founded, 1535—31. Spurzheim born, 1776.

Our Mentorial Bureau.

[In this Department will be noticed such matters as are of interest to correspondents and to the general reader. Contributions for "What They Say" should be brief, pointed, and creamy, to secure publication.]

Go Our Correspondents.

THE PRESSURE OF OUR BUSINESS IS SUCH that we can not undertake to return unavailable contributions unless the necessary postage is provided by the writers. In all cases, persons who communicate with us through the post-office should, if they expect a reply, inclose the return postage—stamps being preferred. Anonymous letters will not be considered.

QUESTIONS OF "GENERAL INTEREST" ONLY will be answered in this department. But one question at a time, and that clearly stated, must be propounded, if a correspondent shall expect us to give him the benefit of an early consideration.

WEIGHT OF BRAIN.—Have you any rule for ascertaining the amount of brain in ounces possessed by a living subject? Do you use apothecaries or avoirdupois weight in such estimates?

Ans. We have no absolute rule for determining the precise weight of the brain during life. We judge of temperament, as to whether the brain is

fine or coarse, and, by various means, whether the skull is thick or thin, and are able to approximate this very closely; and we have only size and quality as means of judging the weight of a brain. But some brains weigh more heavily than others for their size, as some timber and some metals weigh more heavily than others. We sometimes pick up a thick book and find that it feels very light. Another book of the same size may be almost twice as heavy—the paper in one book being fine and compact, in the other coarse and loose. The same law holds in regard to all the tissues of the body, the brain included. Avoirdupois weight, not apothecaries, is generally employed in weighing brain.

HUMAN BODY RENEWED.—Are the bones renewed every seven years, and the flesh about every year? If so, what is the positive proof, and, if such is the case, why are not scars and India-ink designs removed also?

Ans. The human body is not the fixed, permanent thing many persons suppose it to be. On the contrary, every atom of it is in a state of constant

change. Each molecule grows rapidly old and worn out as it performs its office in the economy of nature, and when it can no longer do its work, it dies and becomes waste matter, and is taken up by the proper organs—usually the lymphatics—and conveyed out of the body through the skin, lungs, or bowels. When it dies, its place is supplied by a new molecule produced by assimilation of the food we eat, and this, in its turn, dies and is replaced. These changes are believed to occur in all the tissues, but no special time can be assigned after which every atom in the body has become new again. Some have suggested a period of from five to seven years, but the probability is that in most tissues the change is more rapid. The objection in regard to scars is easily answered. They do gradually become obliterated. But even if they did not, we can easily see that, if each dying atom is replaced by an atom of the same kind, the character of the tissue would not be changed. In regard to tattooing, the ink generally used is an insoluble substance in the skin, and while transformation of atoms goes on all around, the ink, not being tissue at all, is of course unaffected.

A MATRIMONIAL EXCHANGE.—A correspondent in the West asks us this question:

Would it be practicable to devise a safe and beneficent plan of matrimonial correspondence between the women of the East and the men of the West, excluding tobacco-abusers?

Ans. We are not prepared to answer this conundrum. Whatever else may or may not be done, it will be perfectly proper to exclude tobacco.

A COUNTING-ROOM INTEREST.—Can you, or any of your readers, give me a short and simple rule for the equation of payments? A few years ago a prize was offered for such a rule, and was awarded, I believe, to a Boston gentleman. But I have never seen the rule.

Ans. We are unable to gratify our friend who propounds this query. Perhaps some of our mathematical or book-keeping readers can.

ENVY.—What mental faculties are engaged in the production of envy?

Ans. Approbativeness and Self-Esteem, and these are excited to action in the way of envy by various other faculties, as there are many kinds of envy, or envy on many subjects, such as property, love, distinction in scholarship, attainment of honor, office, preferment, etc.

FULTON AND STEAM NAVIGATION.—Does the credit of applying steam to navigation properly belong to Robert Fulton, and when and where was the first ocean trip made?

Ans. Yes; in a certain sense the invention can be said to be due to Fulton, for he was the first to achieve positive success—the first to render navigation by steam at once profitable and practicable. Several persons in America, England, and Scotland had contrived appliances by which they had navigated boats short distances by means of steam, but every attempt was unsatisfactory, and practi-

cally unsuccessful, until Fulton, in 1807, launched the “Clermont” on the Hudson, and made a successful trip to Albany from New York, at the rate of about five miles an hour. The ocean was first crossed in a steamship by the “Savannah,” which sailed from New York to St. Petersburg, *via* Liverpool, in twenty-six days.

THE LAWYER.—What natural talents are needed to become a good lawyer, and what faculties should be strong, and which are least needed? Would it repay one with an ordinary education to devote the years between eighteen and twenty-two to a college course before studying law.

TRELLA.

Ans. All that a man has, or can have, is required to become a good lawyer; but as most men are not perfect, the qualities which are most essential for law or for any other special profession to which a person has aspirations, should be amply developed. A lawyer needs large Perceptive organs to gather the facts which are required; large Eventuality to hold the knowledge ready for immediate use; and large Comparison to enable him to analyze and criticise; and large Causality to reason logically and philosophically upon the facts and principles involved in a case. He needs also a good degree of the mental temperament to give him a studious mind, clearness of intellect, and intensity of feeling. He needs a fair degree of the Motive and Vital Temperaments to sustain him in the labors of his profession, and give his brain vigor and power.

The faculties least needed are, Agreeableness, Imitation, Spirituality, Acquisitiveness, and Parental Love. But it is difficult to consider any faculty of little importance in that profession, because it has to deal with every phase of character and condition, and the more full and complete are all of his developments, the better can he awaken corresponding feelings, sentiments, or thoughts in a jury, and the better can he comprehend the wants and needs of clients.

If one has the means to obtain a college education, it would be well for him to spend the time between eighteen and twenty-two to do so. He would stand higher in the law at thirty-five years of age than he would to have gone at eighteen into a law office, ignoring the more finished culture. A lawyer should be a scholar and a gentleman, as well as profoundly versed in his professional studies.

SNOW-BIRDS.—Here in Northern New York we have flocks of little snow-birds. Some are white, some a light-gray, and others variegated. They remain all winter, picking up the seeds of grass, weeds, etc., and crumbs of bread when thrown out to them from dwelling-houses. In size they are like the sparrow and the ground or chipping bird, having a chirp like the latter. We wish to know whether they are identical with either of those birds, having only changed their plumage, or whether they are a distinct species, and where they go to lay their eggs and hatch.

Ans. The snow-bird is classed with the genus *Junco*, or finch family, of which there is but one

species common to the Eastern United States, there being another species peculiar to the Rocky Mountains, and a third species on the Pacific coast; or, according to another authority, it is a member of the genus *Emberiza*, and of the genus *Fringilla*, of which latter there are two species, one peculiar to Europe, and the other to the United States. The nest is made upon the ground, the entrance generally concealed. The eggs are four in number, yellowish white, with numerous small, reddish brown dots.

WOOD-CUTS.—What kind of wood is used in making wood-cuts for press printing?

Ans. Boxwood, chiefly.

CAN'T STAND STUDY.—A young man writes: "I am fifteen years old, and very fond of study, but as soon as I begin to study for an hour or two, I get a terrible headache, accompanied by a sour stomach. Last year I went off to college, but was there but two months when I had to return home, sick. My physician says my illness was brought on by over-study. What can I do to remedy this? I am very anxious to return to college, but my father is afraid to let me go, as he thinks I will get sick again. I have consulted all the doctors here, but they do me no good. So I write this to you, and hope you will answer."

Ans. We doubt the "over-study" part of the statement, but have no doubt about the "headache" and the illness. But does not this arise from wrong living? Is not the diet at fault? What does the lad eat? We think his headache comes of that "sour stomach," and that from what he eats. His exercise in the open air may be too little, and hours of confinement too long, but if all these matters were properly adjusted, we think the young man may pursue his studies without injury. But will he diet himself according to the teachings of the *Science of Health*? If so, he will go through all right.

TWINS.—Is it proper to say "a pair of twins?" *Ans.* No, for the reason that "twins" in itself signifies a pair.

What They Say.

SOME FACTS ABOUT PHRENOLOGY.—On a November evening, about six years ago, we had gathered around a cheerful fireside in the drawing-room, where Mr. B., then a visitor in our family, was relating his travels through South America. We were interrupted by a rap on the door, to which my father responded, "Come in."

The door was opened, and a laborer from the field appeared, saying that he wanted to speak to father about some cattle. Having soon finished his errand, he departed. As soon as he had gone, Mr. B., discontinuing his narrative, exclaimed, "What a peculiar head that fellow has! Did you notice it? Why, there's nothing too bad for him to do. He will steal everything he can get his

hands upon. He'd rob a widow. He is a worthless character. He should not work on my farm; he is better suited to a jail." This outburst of opinion from Mr. B. amused us, inasmuch as we knew Ned to be a very worthless character. However, we told our visitor that we could not accuse Ned of dishonesty. Mr. B. said, "I base my opinions upon his Phrenology, and am not mistaken." A few months afterward, Ned was arraigned for having stolen a neighbor's hog. A few weeks later it was discovered that he had shot a widow's mule for entering his garden. For the last act he was put in jail. Here were confirmations directly of Mr. B.'s opinion.

On another evening we selected a class of heads, each widely differing from the others, in order to have Mr. B. designate their peculiarities. The first presented for examination was a lad of seventeen, whom we knew to be a great talker, very proud, bigoted, and indolent. The second was shrewd, industrious, honest, and imbued with the walk-right-through spirit. The third a very promising lad, and a special favorite. Mr. B. described each minutely and correctly. And our special favorite, he said, would give us cause to regret his career. "He has a predilection for bad company, and, notwithstanding his capacity for learning, will pursue a downward course, in defiance even of effort to save him," said Mr. B. Time has verified his statement.

Thoroughly convinced of the advantages arising from a knowledge of Phrenology, I commenced reading the PHRENOLOGICAL JOURNAL, and from time to time purchased and read most of the books belonging to what is called "The Student's Set." Lastly, I committed to memory the entire contents of one of the published chart-books. Thus armed, I proceeded to practice, beginning with our servants. The cook felt that I had described her so truly that she re-entered her kitchen telling the others that "Miss 'Melie can tell everything you've done and ever will do." Those over whom superstition and Secretiveness held rule, drew down their hats and bandannas more closely, lest I should divine their thoughts, and for some weeks I was regarded as a supernatural being.

Last fall a friend of mine was much pleased with a gentleman whom he met in a neighboring town, and was very anxious that I should see him and render a phrenological opinion of him. At length opportunity offered. I saw him, and gave the desired opinion thus: "He is a great baby; I have no faith in him; he has fine literary attainments, but no firmness of purpose." My friend was literally astonished, and hoped that I would soon be convinced of the gentleman's real worth, but better acquaintance has verified my opinion. A few years' researches into the science of Phrenology prompts me to say that the sooner one acquires a knowledge of it, the sooner he is prepared to choose his way among his fellow-travelers, and march on to success.

MISS A. C. BARTLETT.

HURRICANE, MISS.

PHRENOLOGY TO THE RESCUE.—Of what? the dearest interests of mankind, and about which they are now torn asunder as never before. It is time to strike, for the voice of the science of mind and matter, transferred and crystallized, are to be heard crying in the street. The man who put the wheat on one side, and the stone on the other to balance it on the back of his horse, did his very best, so far as he saw. They who dispute, have disputed since the world began, whether nature made God, or the reverse; whether Faith sprang from Reason was in accord with reason,* or in clear antagonism with it, and, in fact, a myth, have done their best with the light they had, but they have never, so far as we know, honestly and earnestly applied this physico-metaphysico, scientific instrument to the solution. They have sweat, oh, how long and how many great drops over it! from Genesis to Revelation, and filled mad-houses and battle-fields with their victims in the fruitless endeavor to reconcile mind and matter as they are physically, ocularly demonstrated, as the cap-sheaf of every man they met.

All know that the eyes, ears, etc., are instruments of our consciousness. Let it be equally known that all emotions are similarly impossible without instruments of consciousness, chords strung in unison so as to respond to their, and their only, vibrations. Hence there can be no feeling of benevolence except brain-matter posited and vitalized in love to receive such influx, to recognize such atmosphere; no reason without its correspondent (instrument) mechanism in the brain, with no commingling or substitution of one for another of these, but each differing, as the instruments in an orchestra. So, also, is there no sense of the divine without its vibrating chord in the brain, and no knowledge is possible of the functional activities of this part of the brain to another, any more than the fife can represent the drum in a band, or he who has heard the flute only, can know what would be the effect of the violin. Let this be admitted as a new *sense*, the recognition of the Divine in nature, totally different from, and incapable of, substitution by any other, and its place seen and felt on the surface of the skull, its different degrees of activity estimated; and then let all men cease taking their fellow by the throat because he sees or does not see this all-pervading element. Let Reason stand back and say, We would like to co-operate with this new faculty, if such there be, but, of course, having no avenue of consciousness to it, we must await such opening, meantime not presuming to sit in any-wise in judgment on it.

It must be seen, felt—not written about; the lecture-room is the world, and the text-book, to be read aloud, is standing face to face at the time with a man with a head, and in that head, written all over with the finger of Omnipotence, the traces of infinite wisdom, the clear demonstration in ultimate matter of the problem so long the terror and the torment of humanity.

The seat of worship must be transferred from the outer symbol—church edifice, formulated creed, emblemized mechanisms, etc., etc., which have grown to stand instead of the thing symbolized—to the vertex of the human head, and it and its position studied, instead of rubrics altarcloths, chasubles, etc., etc; and the *taste* must be admitted to be in the *tongue*, not in the *apple*; and the “Our Father” feeling to be the normal result of intrinsic function—no matter what or where the immediate exciting cause—and not a something brought down from a great distance, inoculated into the system, and so propagated by natural increase.

It is claimed, and striven to be enforced, that certain images, pictures—material or immaterial, it matters not—etc., could and should, in and of themselves, compel religion, worship, faith, devotion. We know the sentiment of beauty is not compelled in a dullard by any artistic creation, and that proves that the two, subject and object, are required to compass any result where humanity is concerned; and let people turn away from denouncing the observer because the star is not seen through his glass, no matter how certainly and absolutely demonstrated to be there, and see whether there be any lens in the tube to bring the required focus.

POLITICAL RINGS.—One of our public park gardeners refers to a paragraph in our August number on the “Cost of the Government,” the corruption of parties, etc., and remarks with regard to the way things are done in New York city, thus:

The General Government has set a bad example to our local governments, and, as far as this city is concerned, there is more corruption now than there was in Tweed's reign, but it is managed in a more scientific manner. My connection with the Parks and Public Works enables me to state without fear of contradiction that nothing is so apt to disqualify a man for a position on either place as honesty and independence of character. On the Public Works foremen are permitted to work their own teams, and spend most of the day idle in the shade. Men owning their teams follow suit. I have known foremen to have their private work done by the men in their gang, and the time sworn to afterward in their presence as done in the public service. At present there are gangs left unpaid, as their foremen are under indictment on these charges. There are other foremen engaged in private contracts on the Public Works, and doing the work by men and tools paid for by public money. I have, in my humble way, ventilated this through the press, and also informed the Mayor by a lengthy statement, which I could prove on oath if necessary, but to no purpose. I know you can appreciate the spirit in which this is written—with malice toward none, but with the hope that, notwithstanding my humble position in society, it may have sufficient weight with you.

and others like you, to make some inquiry, and, if this statement be verified, to set about remedying the evil ere it is too late.

TRUTH MANIFEST.—The editor of the *Philadelphia Carriage Monthly* says of the *PHRENOLOGICAL JOURNAL*: "Skeptics would do well to read and ponder over the assertions of this magazine. Phrenology has been held in the background by ignorance and superstition, but the shackles are being broken one by one, and in the front rank of the sciences will it soon be found."

PHRENOLOGY IN KENTUCKY.—The *Owensboro Monitor* thus commends one of our students, Mr. R. E. MACDUFF, who is now lecturing in that State, and will visit Tennessee:

"Not for a long time have our citizens been more highly entertained and edified as by the lectures of Mr. Macduff. Each night has witnessed, not only an increase in his auditory, but in the interest and gratification imparted by the lectures. The fact that each night has drawn out an increased number of our very best people, is indication of the instructiveness and pleasure of these lectures. To our contemporaries of the press in those sections Mr. Macduff shall visit, we sincerely commend him as a gentleman who will perform all he may promise."

A NEWSPAPER'S COUNSEL.—Young man and young woman, don't forget the *PHRENOLOGICAL JOURNAL* in your selections of periodicals for the coming year. Subscribe for it and you will do a wise act—one that you will never regret if you read it and heed its teachings. This is our candid opinion, and we charge nothing for it, but express it because we believe it for the good of humanity.—*Palmyra, Wis., Enterprise.*

[We lift our hat, and beg to thank Mr. Dow, the editor, for this expression of his good opinion.]

THE BOND AND CURRENCY QUESTION.—Having received the following communication from a Kansas farmer, we insert it, with our replies to his criticisms. He says:

1. Your plan of the integral commonwealth is certainly the true organization of the nation, nominating the best men to represent their interests. It is perhaps too great an advance on the present state of society to be well understood; nevertheless, it is useful to expose such ideas. They may attract the attention of an occasional thinker, and, in time, be taken up by the public.

2. I am sorry to find in the "Catechism on Money," by Mr. John G. Drew, the intent of paying the six per cent. gold interest bonds with the new currency exchangeable with 3.65 bonds.

3. It will be difficult enough to get Congress to pass a law providing for the issue of treasury notes exchangeable at will and at par for 3.65 bonds.

4. Why do you raise a new difficulty in connecting the measure with a question of repudiation?

5. At last we have a steady, heavy rain, filling the wells, springs, and creeks. It is too late for corn already cut, and for hay, but in time for late

peaches and late potatoes, if Mr. Frost permits. The grasshoppers came after the corn was cut and ate only cabbage, beans, leaves on the apple trees, and some peaches. They left for the South after a week's stay; did not eat the mulberry trees, and left the potatoes still green enough.

6. The drought was severe; my neighbor, Mr. Lindon, drove his cattle eight miles every day to water.

7. We had plenty in pond, wells, and cistern.

Yours, truly E. N. BOISSIERE.

Ans. We have numbered our correspondent's points for convenience in responding, which we do thus:

1. Knowing our correspondent's antecedents, we deem his approval very encouraging and gratifying.

2. In the "Catechism on Money" no payment of the six per cent. gold interest bond with currency was recommended. The convertibility of the greenbacks into the 5.20 bonds, as defined in the enacting clause of the bill creating such bonds, was thus set forth: "And be it further enacted, That to enable the Secretary of the Treasury to fund the Treasury notes and floating debt of the United States;" by the statement of intent made by Hon. E. G. Spalding, who was Chairman of the "Committee of Ways and Means," which drafted the bill thus: "The right to exchange these notes at par for six per cent. bonds was distinctly authorized by the second section of the legal tender act, and was in the nature of a contract made by the Government with the holders of the notes;" by the Hon. F. E. Spinner, Treasurer of the United States, thus: "It would seem to be but fair and just that the attribute of the convertibility of these notes into a stock of the United States should be restored;" by the Hon. Thaddeus Stevens, thus: "When the bill was on its final passage, the question was expressly asked of the Chairman of the Committee on Ways and Means, and as expressly answered by him, that only the interest was payable in coin;" by the Hon. John Sherman, thus: "If the bond-holder refuses to take the same kind of money with which he bought the bonds, he is an extortioner and a repudiator;" by the Hon. Oliver P. Morton, thus: "We should do foul injustice to the Government and to the people of the United States, after we have sold these bonds on an average for not more than sixty cents on the dollar, now to propose to make a new contract for the benefit of the holders;" and to the indorsement on any greenback in your possession.

3. If that was easily done, it would be the first time in history that a class surrendered its privileges, even though usurped or obtained by fraud.

4. Repudiation was not counselled—only strict adherence to the letter and spirit of the law.

5. The drought of money spoils our industries worse than the drought of rain cuts short crops. Our politicians, office holders, and tax gatherers

are omniverous and omnipresent, and can't be bluffed off like grasshoppers with cabbages and beans.

6. Of course we are not posted on the details, but should think that after Mr. Lindon had driven his cattle once eight miles to water, he would have let them stay there until it rained—we would.

7. His foresight in erecting those big cisterns gave him a great advantage over his less provident neighbors, and should teach his county, if not his State, a lesson.

M. DE BOISSIERE is a French gentleman of large culture and wealth. When we took New Orleans, he was impressed with the thought that many negroes of French ownership would be thrown upon their own resources, not knowing our language. He sold part of his property (near Bordeaux) at a sacrifice, and, until the war was over, contributed by his personal efforts and means in helping them. He then bought a tract in Kansas, and is a farmer.

WISDOM.

FORTUNE dreads the brave, and is only terrible to the coward.—*Seneca*.

THE remedy for "hard times" is patient industry. Let them who complain try it.

ECONOMY is no disgrace; it is better to be living on a little than outliving a great deal.

THE end of man is an action and not a thought, though it were the noblest.—*Sartor Resartus*.

Too low they build who build beneath the stars.—*Young*.

CIVILITY costs nothing, and buys everything.—*Lady Mary Montague*.

WHEN society begins to profit by a man's misfortune, his difficulties rarely terminate.

ONE of the most important rules of the science of manners is an almost absolute silence in regard to yourself.

MANKIND are citizens of the earth, and bound, both by moral and civil law, to preserve and take care of their lives and health.

DON'T tell us of to-morrow—

There is much to do to-day,

That can never be accomplished,

If we throw the hours away.

Every moment has its duty—

Who the future can foretell?

Then why put off till to-morrow

What to-day can do as well?

THE discovery of what is true, and the practice of what is good, are the two most important objects of life.

A KNOWLEDGE of science attained by mere reading, though infinitely better than ignorance, is knowledge of a very different kind from that which arises from contact with fact.—*Huxley*.

VIRTUE may be misrepresented, persecuted, consigned to the grave, but the righteous wake not more assuredly to the reality of their hopes, than does virtue to an immortal remembrance.

IN most quarrels there is a fault on both sides. Both flint and steel are necessary to the production of a spark; either of them may hammer on wood forever, and no fire will follow.

LEARN thoroughly what you learn, be it ever so little, and you may speak of it with confidence. A few clearly defined facts and ideas are worth a whole library of uncertain knowledge.

MIRTH.

"A little nonsense now and then
Is relished by the wisest men."

POMOLOGISTS consider it a remarkable fact that the first apple in Paradise should have turned out the first pair.

A MISSING man was lately advertised for and described as having a Roman nose. He won't be found. Such a nose as that will never turn up.

A MICHIGAN paper recently closed an obituary notice with the misquotation "though dead, he yet squeaketh." The printer, apparently, wasn't minding his p's and q's.

"MRS. GRIMES, lend me your tub." "Can't do it—the hoops are off—it's full of suds—besides, I never had one—I washes in a barrel, and wants to use the tub myself—besides, I've lent it to a neighbor, who hasn't returned it."

"You say, Mr. Snooks, that you saw plaintiff leaving the house. Was it in haste?" "Yes, sir." "Do you know what caused the haste?" "I am not sartin, sir, but I think it was the boot of his landlord." "That will do. Clerk, call the next witness."

WHAT relation is a loaf of bread to a locomotive? You'll never guess it. Bread is a necessity, a locomotive is an invention. Now, as necessity is the mother of invention, the maternal relation of a loaf to a locomotive will be seen at once.

A BOY found a pocketbook, and returned it to its owner, who gave him a five cent piece. The boy looked at the coin an instant, and then handing it reluctantly back, audibly sighed, as he said, "I can't change it."

A MISSOURI man wheeled his wife, who was a cripple, three miles to see a funeral. The poor lady said it was the first day's real enjoyment she had seen for seven years.

A WITTY man lately said: "Last year I saw a watch spring, a note run, a rope walk, a horse fly, and even the big trees leave; I even saw a plank walk, and a bank run; but the other day I saw a tree box, a cat fish, and a stone fence. I am prepared to see the Atlantic coast and the Pacific slope.

The Library.

In this department are given the titles and prices of such NEW BOOKS as have been received from the publishers. Our readers look to us for these announcements, and we shall endeavor to keep them well informed with reference to the current literature.

AS usual at this season of the year, there are great stacks of "gift books," with "nothing in them" save fine paper, pretty pictures, and expensive bindings. Old books, "keepsakes," under new names, are revamped and palmed off on ignorant purchasers, who distribute the trash, and cover up center-tables, mantel-pieces, and book-shelves.

Now and then we have something worthy—a book of poems by a poet, a book of information by a scholar, or a book of reference by a man of science. We counsel our friends to supply themselves with "good books for all," embracing something for men, women, and children, something which teaches them to know themselves and how to develop symmetrical bodies and minds by calling out the good and suppressing the bad. After this we commend either of the new and excellent encyclopedias now coming through the press. Everybody who can afford it ought to have an encyclopedia, an unabridged dictionary, a plain-print Bible, and a concordance. After this he may select a library from a world of books, good, bad, and indifferent, the more of the former and the less of the latter the better. No one can afford to throw away time on a silly writer, nor on a shallow, silly talker. Let us choose wisely whom we will read and whom we will hear.

CLINICAL LECTURES ON THE NERVOUS SYSTEM. By Wm. A. Hammond, M.D., Professor of Diseases of the Mind and Nervous System in the University of the City of New York; President of the New York Neurological Society, etc. Reported, edited, and the Histories of the Cases Prepared, with Notes, by T. M. B. Cross, M.D., Assistant to the Chair of Diseases of the Mind and Nervous System in the University of the City of New York, etc. One vol., octavo; pp. 292; muslin. Price, \$3.50. New York: D. Appleton & Co.

We differ widely from the authors on many points, and can not commend without qualification this their production. *They* belong to the "old school," *we* to the new. Hygiene—not drugs—is the basis of *our* teachings. Here are the subjects, or diseases, treated in these lectures:

Cerebral Thrombosis; Cerebral Embolism; Cross-Paralysis; Congestion of the Spinal Cord; Chronic Inflammation of the Spinal Cord; Reflex Paralysis; Lead-Paralysis; Chorea; Aphasia; Facial Paralysis; Glosso-labio-laryngeal Paralysis; Cerebral Hæmorrhage; Hæmatoma of the Dura Mater; Posterior Spinal Sclerosis; Athetosis; Progressive Muscular Atrophy; Convulsive Tremor; Chronic Basilar Meningitis; Cerebral Congestion; Epilepsy; Facial Neuralgia; Cervico-occipital Neuralgia; Intercostal Neuralgia; Sciatica; Organic Infantile Paralysis.

PRINCIPLES OF MENTAL PHYSIOLOGY, with their Application to the Training and Discipline of the Mind and the Study of its Morbid Conditions. By W. B. Carpenter, M.D., etc. Octavo; pp. 722. Price, \$3.50. New York: D. Appleton & Co.

In a recent notice of this work, the *N. Y. Medical Journal* says:

After an introductory chapter on "The General Relations between Mind and Body," in which the author's theory of the autocracy of the will is developed, he passes in review "The Nervous System and its Functions," afterward taking up, *seriatim*, "Attention," "Sensation," "Perception and Instinct," "Ideation and Ideo-Motor Action," "Emotion," and "Habit." "Special Physiology" follows next in order, and leads to the consideration of sleep, dreams, somnambulism, trance, insanity, and the author's foster-theory, unconscious cerebration. This portion of the subject is treated of in a manner at once pleasing and instructive.

The work is particularly serviceable on account of its bearing upon the moral element in man. The author takes the facts of human nature as he finds them, and, without attempting an analysis of their origin or character, shows, with great felicity of expression, how they are susceptible of modification in the interest of private and public morality.

The only fault of the work, or, rather, *the* fault of the author lies in the fact that he does not understand Phrenology. He opposed Phrenology in his former works, now he accepts some of its principles, but ignoring Gall and Spurzheim, he makes a failure when treating on the faculties through which the mind acts—as others do, who are alike ignorant.

ÇA IRA. A Novel. By Wm. Ducas Trammel. One vol. 12mo; pp. 358; muslin. Price, \$1.50. New York: U. S. Pub. Co.

The *Christian Age* says: "The author dates from Waverley Hall, Georgia. The scenes are mainly laid in Atlanta, and many well-known Georgians figure in its pages. Whether they will like the sketches of themselves or not, remains to be seen. The book is disfigured by a mass of matter introduced in order to justify the outrages of the Paris Commune. The spirit of the book is not good, but its pages show that the author has ability, which, if cultivated, would enable him to write something really worth reading. Among the very best things in the volume are the aphorisms quoted from our friend, Dr. Lipscomb, the justly venerated Chancellor of the University of Georgia.

"From the Southern papers we perceive that

Mr. Trammell is, like other prophets, without honor in his own country.

"The Atlanta *Herald* says: What 'Ca Ira' means we neither know nor have the means of finding out; and, indeed, a careful reading of the book convinces us that, in order to understand and appreciate the story, it is not at all necessary to solve the important conundrum which appears upon the covers."

[Dr. Deems, of the *Christian Age*, who also hails from Georgia, may be supposed to express sentiments kindly to the author, must, in this case, be accepted as authority on the merits of the book.

THE HYGEIAN HOME COOK-BOOK; or, Healthful and Palatable Food without Condiments. A Complete Book of Recipes or Directions for Preparing and Cooking all kinds of Healthful Food in a Healthful Manner. By R. T. Trall, M.D. Price, in paper, 25 cents; nicely bound, 50 cents. New York: S. R. Wells, Publisher.

This is quite new, and gives the best experience of the author's extensive knowledge as to what it is best to eat to make the best blood, bone, muscle, and nerve. All the varieties for healthful bread, and how to make it, are given, together with other substances which are good to eat to make healthy men, women, and children.

A MEMPHIAN'S TRIP TO EUROPE with Cook's Educational Party. To which is added Letters from Revs. T. W. Hooper, A. B. Whipple, and C. W. Cushing; also Letters from Several Ladies and Gentlemen of the Party. By Samuel Watson. One vol., 12mo; pp. 352; muslin. Price, \$1. Nashville: Southern Methodist Publishing House.

Our reverend and venerable author writes with as much vim and exuberance as a youth of twenty-two. He is a capital observer, a good delineator, and permits the reader to look at things just as they are through his educated and genial glasses. He takes the reader with him. Messrs. Cook, Son & Jenkins, the excursionists, ought to give Mr. Watson a vote of thanks.

NORWOOD; or, Village Life in New England. By Henry Ward Beecher. With Illustrations. One vol. 12mo; pp. 549; embossed muslin. Price, \$2. New York: J. B. Ford & Co.

An elegant edition of Mr. Beecher's first and only story. The book had a run in its plain form, and now that it comes out with illustrations, of course everybody will want it. We think the story—which is wonderfully life-like—will live long after the present generation shall have been gathered to their fathers.

YALE LECTURES ON PREACHING. By Henry Ward Beecher. Delivered before the Theological Department of Yale College, New Haven, Conn., in the Regular Course of the "Lyman Beecher Lectureship on Preaching." From Phonographic Reports by T. J. Ellinwood. Third Series. One vol., 12mo; pp. 326; embossed muslin. Price, \$1.50. New York: J. B. Ford & Co.

In brief, we may state that, among all the pro-

ductions of this most prolific writer, this is believed to be the best of all his performances. Here are the subjects of his discussions:

The Preacher's Book; How to Use the Bible; The True Method of Presenting God; Conceptions of the Divinity; Practical Use of the Divine Ideal; The Manifestation of God Through Christ; Views of the Divine Life in Human Conditions; Sins and Sinfulness; The Sense of Personal Sin; The Growth of Christian Life; Christian Manhood; Life and Immortality.

Had Mr. Beecher performed no other service, this alone would hand his name down to posterity. We commend these Yale Lectures not only to preachers, but to all readers.

VITAL MAGNETISM. Being an answer to Dr. Brown-Sequard's Lectures on 'Nerve Force' By E. D. Babbitt, A.M. Price, 25 cents.

This is the title of an interesting pamphlet earnestly defending the magnetic theory of cure against the hot iron burning process of Dr. Brown-Sequard, as applied to the late Senator Sumner and Horace Greeley.

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TOINETTE. A Novel. By Henry Churton. One vol., 12mo; pp. 510; cloth. Price, \$1.50. New York: J. B. Ford & Co.

A story of Southern life, in which vivid pictures are given representing slave life, the emancipation, and its effects upon white and black, ending in the marriage of a master to his former—almost white—slave. The author gives us "a touch of nature, which makes all men kin."

THE POCKET-CASE REFERENCE AND DOSE BOOK. By C. Henri Leonard, A.B., M.D. 18mo; pp. 28. Price, 35 cents. Chagrin Falls, Ohio: Published by the Author.

This Dose Book may be useful to those who prescribe drugs to their patients who are willing to take them, but *we* have no occasion for drugs of any sort, and the Dose Book is of no possible use to us.

HOMES OF THE PRESIDENTS. By Laura C. Holloway. Large 8vo vol.; pp. 500; seventeen portraits on steel, and numerous engravings on wood. Price, in extra cloth, \$3.75. Sold only by Subscription. New York: U. S. Pub. Co.

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THE CHRISTIAN MONITOR, Mrs. M. M. B. Goodwin's excellent magazine, has been removed from Cincinnati, O., to St. Louis, Mo. By this change the magazine gains strength, and will, no doubt, become a permanent institution in this great Missouri city. St. Louis is growing in wealth and wickedness, and *needs* the *Christian Monitor*.

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MR. THOMAS MEEHAN, editor of the *Gardener's Monthly*, and proprietor of the Germantown nurseries, Philadelphia, Pa., has issued an Autumn Catalogue of Deciduous Trees, Deciduous Shrubs, Weeping Trees and Weeping Shrubs, Evergreens, Vines and Climbers, Fruit Trees, Hedge Plants, Roses, and of everything to be found in first-class nurseries.

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NEW MUSIC.—Mr. F. W. Helwick, of Cincinnati, publishes a ladies' serio-comic song, in blue and gold, entitled, "Oh, Isn't he a Tease," "Only in Fun," at 50 cents. The piece is ornamented with a beautiful photographic portrait of Miss Ada Richmond, the popular singer.

NEW YORK TRIBUNE EXTRAS, Nos. 21, 22. One Year of Science. Containing Scientific Views of Comets, Philological Convention at Hartford, Chemistry's Centennial, American Science Association at Hartford, and Bayard Taylor in Africa—all for 25 cents. Address the *Tribune*, New York.

METALLINE-MACHINERY WITHOUT LUBRICANT. The American and Foreign Metalline Company, No. 61 Warren Street, New York, have issued an illustrated pamphlet, giving information as to the usefulness of this recent discovery. The company is composed of the following officers: President, Hon. William W. Campbell; Secretary, John L. Burleigh; Directors, Wm. W. Campbell, Edward H. Tracy, Chief-Engineer Department of Public Works, New York, Stuart Gwynn, M.D., Douglas Campbell, Joseph Bell; Consulting Engineer, Stuart Gwynn; Counsel, Hilton, Campbell & Bell, 257 Broadway, New York. The pamphlet may be had on application, and all the facts in regard to this new thing thus obtained.

THE LIQUOR TRAFFIC: The Fallacies of its Defenders. A Sermon by Rev. Edward G. Read, pastor of Third Presbyterian Church, Elizabeth, New Jersey. 12mo; pp. 23; pamphlet. Price, 15 cents. N. Y. Nat. Temp. Society.

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